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NOTES ON SANITARY PROGRESS IN PAN AMERICA

On February 23, 1925, the United States Senate ratified an International Sanitary Convention of the American Republics known as the Pan American Sanitary Code (see PUBLIC HEALTH REPORTS, Vol. 40, No. 11, March 13, 1925), of which the following is one of the provisions:

Article 1. The objects of this code are—

- (a) The prevention of the international spread of communicable infection of human beings.
- (b) The promotion of cooperative measures for the prevention of the introduction and spread of disease into and from the territories of the signatory Governments.
- (c) The standardization of the collection of morbidity and mortality statistics by the signatory Governments.
- (d) The stimulation of the mutual interchange of information which may be of value in improving the public health and combating the diseases of man.
- (e) The standardization of the measures employed at places of entry for the prevention of the introduction and spread of the communicable diseases of man, so that greater protection against them shall be achieved and unnecessary hindrance to international commerce and communication eliminated.

In view of the above, there will be published at intervals, as space may be available, notes or reports and occasionally papers or theses on public health subjects from the health departments of the nations signatory to the Pan American Sanitary Code.

Recent Sanitary Progress in the Argentine

From August, 1923, to August, 1924, the following additional sections have been incorporated into the National Department of Hygiene, the National Health Organization of the Argentine Republic:

- (1) Infant welfare section.
- (2) Section charged with the prevention of syphilis, leprosy, and venereal diseases.
- (3) Section charged with the prevention of trachoma and infectious diseases of the eye.
- (4) Section for popular health education.

- (5) Section for the prevention and cure of hookworm disease.
- (6) Section for the prevention and cure of tuberculosis.
- (7) A mental hygiene section, including alcoholism, drug addiction, and the care of the insane.
- (8) Section for the prevention of typhoid fever.
- (9) Section for the prevention of epidemic goiter.
- (10) Malaria prevention section.

Tuberculosis

A hospital has recently been established at Mar del Plata for the treatment of bone tuberculosis in children. A new tuberculosis preventorium has recently been opened at Banfield, a suburb of Buenos Aires. Some 40 or 50 children are now receiving care in this preventorium.

THE COMBAT AGAINST TUBERCULOSIS IN EARLY CHILDHOOD

UNCONSCIOUS IMMUNIZATION AND ARTIFICIAL VACCINATION

Extract from a paper presented at the Fourth Pan-American Congress on Child Welfare, Santiago, Chile, by Dr. GREGORIO ARAOZ ALFARO, Professor of the Faculty of Medicine, Buenos Aires; President, National Department of Hygiene, Argentine Republic; President of the Argentine League against Tuberculosis.

Three original theories, which have been accepted in recent times, should, in my opinion, control the present-day direction of the struggle against tuberculosis. These are—

1. *That tuberculous infection is almost always acquired in infancy* and that tuberculosis in the adolescent and the adult, especially tuberculosis in the evolutive pulmonary forms, is, in the majority of cases, the product of *exogenous or endogenous* reinfections, the latter being due to the revival of a tuberculosis latent since childhood. Hence the prime importance of the antituberculosis fight in infancy, which I have particularly insisted upon for many years.

2. *That in civilized countries, especially in densely populated centers, the great majority of children are infected by the tubercle bacillus before the age of 15 years, but that in most instances these infections remain absolutely latent* and can only be revealed through tuberculous manifestations following repeated slight or passing illnesses wrongly interpreted as gripe, digestive infections, tracheo-bronchitis, or simple febrile states without other symptomatology.

3. That if these children, already infected by the bacillus of tuberculosis, but continuing in good health; that is to say, children in whom the process remains absolutely latent, are later again exposed to tuberculous contagion, they resist it much better than do those who are entirely without previous infection.¹

¹ Marfan, in an admirable clinical exposition, asserted, as far back as 1898, that surgically cured tuberculosis, especially scrofula, adenitis, osteo-arthritis, etc., conferred a relative immunity against pulmonary tuberculosis; and this theory, which practically no one accepted at that time, is to-day generally admitted.

The experience of the European war, a colossal experience in all branches of hygiene and medicine, has brought new knowledge, and has fully proved that which we have observed in our own country among natives after the "desert war;" that is to say, *that men coming from sparsely populated communities of Asia and Africa were much less resistant to the contagion than the European troops, and not only succumbed to it in much greater proportion than the whites, but also succumbed to the acute and generalized forms of tuberculosis which are similar to those which preeminently attack the young, undersized child, who is known to be extraordinarily susceptible to tuberculous contagion.*²

Such susceptibility to tuberculosis in colored troops, a fact observed by both English and French military physicians, can not be explained as occurring in men generally more robust and vigorous than Europeans of cities, unless that, having grown up and lived in semidesert surroundings and almost wholly free from Koch's bacillus, they have not been able to acquire that resistance which is conferred by the slight bacillary infections which remain more or less latent in the children of thickly populated centers.³

There is, then, in the life of the cities the possibility, frequently realized, that contact with small numbers of Koch's bacillus, diluted in large volumes of air and diminished in virulence by desiccation and the action of light, such as are encountered in the air of the street, in places of assemblage, in passenger vehicles, etc., confers *on the child a sort of relative immunity, thus naturally bringing about a slow, unconscious vaccination.*

This infection, in minimum doses and by naturally attenuated bacilli, up to a certain degree does not appear undesirable, since it is capable of producing a slow and gradual immunization if the child is kept in good condition with regard to hygienic living and diet and does not become debilitated or have an illness which would diminish its resistance, producing a more or less prolonged state of anergy.

This is certainly not the case with massive doses and with virulent microbes, such as are found more or less in pulmonary affections in an active and destructive state, which scatter around them great numbers of highly virulent germs. If this contagion reaches young children 1 or 2 years of age, it generally gives rise to grave and rapidly

² Borrel: Pneumonie et tuberculose chez les troupes noires. Annales de l'Institut Pasteur, 1920.

Calmette: Hacia la preservación de la humanidad contra la tuberculosis. Revista Internacional de Sanidad, July, 1920.

Cummins, L. Lyle: La tuberculosis en las tribus primitivas y su relación con la tuberculosis de los países civilizados. Revista Internacional de Sanidad, September, 1920.

³ Sanarelli: Tuberculosis ed evolucione sociale, 1915.

Bernard, León: Les idées actuelles sur l'infection tuberculeuse. Annales de Médecine, 1920, t. VIII, p. 54.

Calmette, A.: Les acquisitions recentes sur la tuberculose, etc. Compendio a l'Académie de Médecine de Paris, Nov. 11, 1919.

—: L'infection bacillaire et la tuberculose chez l'homme et chez les animaux. Paris, 1920.

fatal forms of tuberculosis (broncho-pneumonia, miliary tuberculosis, meningitis, etc.). This is the infection especially to be feared. From these particular conceptions, which appear to me to have been just recently acquired, I believe that the following conclusions can be deduced:

1. It is not desirable that the child should reach adolescence without having had some contact with the Koch bacillus, since, in that case, his absolutely virgin organic soil will not present any resistance whatever to the first infective contact, and the consequence will be a grave and often fatal form, which, as is known, abounds in the life of the cities. It is therefore, only in early childhood, especially in the first two years of life, that extreme care should be taken absolutely to protect, if possible, the infant organism against the ingress of the Koch bacillus, something that is indeed difficult completely to accomplish in densely populated centers.

2. The infection from minimal doses which may be acquired in the streets, places of assemblage, etc., by means of small numbers of bacilli already weakened in virulence by desiccation and the action of sunlight and diluted in great volumes of air, is not highly dangerous for the organisms of infants in a state of good general nutrition and brought up in good hygienic conditions.

Only in debilitated children or children subject to faulty hygienic conditions (crowded, damp, or dark dwellings, lack of proper air, light, and physical exercise, improper nourishment, etc.) or children predisposed by diseases such as scarlet fever and whooping cough, could such contact excite tuberculosis more or less active. In other cases slight latent infections would undoubtedly be caused, with consequent gradual immunization of the organism; that is to say, there would occur that which it has not yet been possible to obtain with certainty by means of artificial vaccination against tuberculosis—a vaccination which, in spite of the labors of Maragliano, Ferran, Shiga, and others, has not so far been demonstrated as absolutely efficacious.

The recent work of Calmette permits new hope in this direction; but at the present time we can not count on this artificial method of immunization.

3. The protection in childhood does not imply, then, the complete removal from the environment, almost invariably bacilliferous, of populous centers. It should, however, provide for the complete avoidance of the virulent and mass contagion, already mentioned, and not be concerned, on the other hand, with the slight, scattered, and isolated infections which are common to every densely populated center.

It should provide—

(A) For early childhood, immediate separation from every infected family environment, especially if the person capable of transmitting the germ be the mother or other person who must have frequent contact with the child.

In this case the placing of the child in a healthy environment, in the country if possible, should be done as early as possible, because it has been shown, and the recent studies of Bernard and Debré have confirmed it, that in a few weeks, sometimes by contact, infection has taken place. It is necessary, therefore, to create "family groups" for such children in healthful locations, in the country if possible; and, as with us it is difficult to secure such a place under proper conditions, it is necessary to institute preventive nurseries for these small children, in which they can be brought up with adequate diet and free from all contagion.

(B) For children who have passed the second or third year of age, separation from the infected family surroundings is also supremely desirable, and all means possible should be employed to place them in the country, in the manner of the Granche work in France, or in children's preventoriums in the country, such as that which the Argentine League against Tuberculosis has established at Banfield (Hogar Jose Elordi) and that which the Public Welfare Service of Buenos Aires is to establish shortly.

In the second stage of childhood the child may be left with its family, even though tuberculosis be present in the home, always with the understanding that the infected persons observe all the prophylactic precautions recommended and that the child's home and living conditions be satisfactory.

Thus, then, in the second stage of childhood the general conditions of life, proper hygienic standards being followed, constitute the important factor of prophylaxis, without the necessity for more or less complete separation on which we have insisted for the first stage of childhood.

(C) What I have called in various articles "indirect prophylaxis," that is to say, everything that tends to maintain health and increase the physical vigor of the organism and its defenses against disease, should have first place in the combat against tuberculosis (hygienic, airy, and sunny dwellings, nourishing food, healthful schools and physical exercises in the open air, hardening against cold by means of the fresh-air habit and cold baths, vacation camps, and, for the weaker persons, permanent camps in the mountains or on the seashore, etc.).

(D) Given the relative facility with which children infected with the latent forms of tuberculosis infection are maintained absolutely unharmed, and with which they are cured of the attenuated forms

of the disease which are common in childhood (adenitis, scrofula, etc.), we must especially interest ourselves in the early recognition of such latent infections, masked or attenuated forms, especially through the general use of tuberculin reactions and of the Röntgen rays, in order that such children may be subjected to the hygienic and climatic treatments which are not only curative but which also aid in immunization against subsequent and more virulent attacks.

The early and proper treatment of affections called pre-tuberculous, which are, in general, cases of latent or masked tuberculosis, is, therefore, of great social importance, and the State should use every endeavor to have such treatment applied under the best conditions to all who require it. Schools for enfeebled children should be increased in number, as well as open-air camps in the mountains or by the seashore; and it should be assured that these establishments are supplied with all the essential factors of treatment, including specific remedies (tuberculins, etc.), which, when administered by competent and experienced physicians, can contribute to the hastening of the active immunization of the organism.

AN OUTBREAK OF TYPHOID FEVER CAUSED BY MILK-BORNE INFECTION

By L. L. LUMSDEN, Surgeon, United States Public Health Service

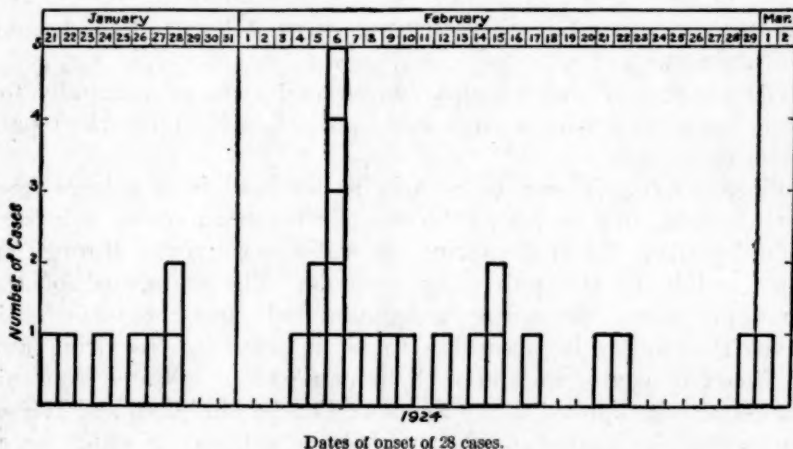
On March 12, 1924, the Surgeon General of the United States Public Health Service received a request from the authorities of Lincoln Memorial University at Harrogate, Tenn., for assistance in an investigation of an outbreak of typhoid fever at that institution. The request was approved by the Tennessee State Health Department. The writer was detailed for the duty. He arrived at Harrogate early on March 15 and, with Mr. H. R. Fullerton, director of the division of sanitary engineering of the State health department, began a study of the situation. The excellent cooperation received from the university authorities and the presence of a number of convalescents from whom epidemiological data could be obtained quickly at the improvised hospital in the university grounds greatly facilitated the work. Our field surveys and epidemiological studies were completed by the evening of March 17, at which time a report with definite recommendations was submitted to the members of the faculty and others concerned.

The investigation included (1) a survey of the water supply and the excreta-disposal system of the university, (2) a detailed epidemiological inquiry among a fair sample of the persons stricken in the outbreak, (3) a canvass of 86 resident students who were not stricken, and (4) an examination of conditions under which milk and other foods possibly involved were produced and served.

EXTENT, DISTRIBUTION, AND CHRONOLOGY OF THE OUTBREAK

At the beginning of the outbreak there were about 430 students at the university. Of these, about 330 were resident and 100 were day students. Besides the resident students, the university had a resident population of about 75, composed of members of the faculty with their families and employees with their families.

The period of the outbreak was from January 21 to March 1, 1924. At least 100 cases of typhoid fever occurred in the course of the outbreak. Eight terminated in death. The outbreak reached its height about February 6, at which time a majority of the students left the university and returned to their homes in Tennessee, Kentucky, Virginia, and other States. A number of the cases—about 40 per cent of the total—developed among the students who went home before onset of illness. Besides the diagnosed cases there were probably among the students who had left the university because of the outbreak some mild cases which were not recognized as typhoid and which were not reported to the university authorities.



The outbreak was confined to the resident students who took their meals in the mess halls of the university. About 100 persons residing on the campus, and the 100 day students, who were exposed to the water supply and other conditions in the university grounds, but who took none of their meals in the mess halls, escaped entirely. Thus it was apparent that the outbreak must have been caused by infection distributed in the mess halls. Over 100 of the 300 resident students taking their meals in the mess halls were stricken. Such an attack rate is remarkably high, and, in itself, is strongly suggestive of heavy dosage infection.

Of the forty-odd typhoid fever patients remaining under treatment at the university hospital at the time of the investigation, 28 were

sufficiently near recovery to be interviewed personally. The detailed epidemiological histories obtained from these 28 patients on March 16 are believed to be fairly representative for the whole group of cases occurring in the outbreak.

The dates of definite onset (date patient took to bed) of these 28 cases are indicated in the accompanying graph (p. 1303).

The interval of six days without a case onset between January 28 and February 4 perhaps would have been filled in if the dates of onset of all the cases occurring in the outbreak could have been ascertained accurately; but if it should represent a break in the current of infection, it would have epidemiological significance.

Of the 28 cases furnishing detailed epidemiological histories, 17 were in boys and 11 in girls. The age range was from 16 to 22 years. The age-sex distribution of the disease appeared to be in the proportion of the age-sex distribution of the whole student body.

FINDINGS

The university is located on extensive grounds with topography, climate, and other factors presenting every natural advantage for healthfulness.

The systems of water mains and sewers, installed originally for use in connection with a large hotel project, are for the most part somewhat archaic.

Water supply.—The water supply is obtained from a large free-flowing spring in a cavern on the side of a mountain over a mile from the university. From the spring the water is conveyed through an iron conduit to the university grounds. The watershed of the mountain above the spring is uninhabited, and the water as it leaves this source is, according to all indications, free from any likelihood of contamination with human excreta. Water from this same source is supplied to the towns of Cumberland Gap and Harrogate, with an aggregate population of about 800, both of which towns escaped the outbreak.

It appeared that the water supply neither at its source nor in its course from the spring to the university grounds could have been infected so as to be a factor in the causation of the outbreak. The mains in the university grounds through which the water is distributed are made of wood. They leaked at many points. Their capacity was much more than necessary to serve their purposes. A water pressure was not maintained in them constantly. Therefore, the possibility of contamination of some of the water mains by seepage of sewage from some near-by leaky sewers was considered. Bacteriological examinations made by the State health department indicated that colon bacilli at times got into the water in the course of its distribution

through the system of mains in the university grounds. The freedom from infection of some 200 persons who drank water regularly from the taps in the university grounds but who took none of their meals at the mess halls during the period of causation of the outbreak proved, however, that the university water supply was not the vector of the infection.

Excreta disposal.—Though the sewerage system was in obvious need of drastic improvement, and though some grossly insanitary open privies were in use within the university grounds, no evidence was found that the university excreta disposal system was an important factor in the spread of the infection.

Place of residence.—Of the 330 resident students at the university during the period of causation of the outbreak, 84 were domiciled in Norton Hall, 119 in D. A. R. Hall, 77 in Grant Lee Hall, 34 in Avery Hall, 2 in the Conservatory, and 14 at private residences within the university grounds. Of the 28 students in whom the cases especially investigated developed, the places of residence during the period of causation of the outbreak were as follows: 10 at Norton Hall, 7 at D. A. R. Hall, 7 at Grant Lee Hall, 3 at Avery Hall, and 1 at a private home. Thus it appeared that place of residence within the university grounds did not in itself influence importantly the chances for infection.

Diagnosis and clinical course of cases.—The clinical course of the cases was quite typical of typhoid fever caused by heavy dosage infection in young vigorous persons. For a large majority of the cases the clinical diagnosis was confirmed by laboratory tests.

The mode of onset and the clinical course of the cases furnished contributory evidence for the epidemiological diagnosis of the situation. In many of the cases the onset was sudden with severe headache, chill, sharp abdominal pain, or a feeling of being "completely knocked out." For a large proportion the temperature recorded immediately after the student was reported ill was as high as 104° F., and after running high for some days gradually declined. Thus, the temperature charts presented a very different picture from that with the step-ladder rise usually given by cases caused by small dosage infection. The duration of the fever in the cases occurring in this outbreak was seldom over three weeks, and for a very considerable proportion not more than two weeks. Intestinal hemorrhages were common—occurring in over 60 per cent of the cases treated at the university hospital. Of the 28 cases especially studied, 12 either had sudden onsets of definite symptoms or were ill enough to give up and go to bed after having prodromal symptoms for a period of less than four days.

Immunization.—Five, or 18 per cent, of the 28 cases were in students who had received three doses of antityphoid vaccine within the previous four years—one in 1920, two in 1922, one in 1923, and one had received the third dose only 10 days before onset of illness. Of the 86 students not stricken in the outbreak who were canvassed, 32, or 37.2 per cent, gave a history of having received antityphoid vaccine within the five-year period ending December 31, 1923.

Three and five-tenths per cent of the cases and 9.3 per cent in the control group gave a history of having had an attack of typhoid fever before December 1, 1923.

The percentage of cases among the students who either had received antityphoid vaccination or had had a previous attack of typhoid fever pointed to heavy dosage infection in this outbreak.

Bacillus-carriers.—As the outbreak was exclusively among the students taking meals in the university mess halls, and since the much exploited human "carrier" hypothesis may be applied conveniently on general and superficial evidence to almost any occurrence of any one of numerous infectious diseases, it was quite natural for the presence of a typhoid-bacillus "carrier" among the cooks or waiters or other workers in the mess halls to be suspected as the source of the infection. Such locally popular suspicion was strengthened somewhat perhaps by the fact that a recently employed cook in the main mess hall was named "Mary."

Much of the work in the mess halls was done by students. Careful attention was given in the course of our studies to the possibility of a "carrier" among the servants employed who were in a position to infect the food served to the students who developed typhoid fever.

From the information obtained, it appeared that Mary W., a colored woman employed as cook, was the only worker in the mess halls who was in a position possibly to have operated as a major factor in the spread of the infection. Mary was engaged as cook from November 22, 1923, to January 24, 1924. The main part of the period of causation of the outbreak was between January 1 and February 10. Thus, the synchronology was somewhat suggestive. She cooked in the kitchen at Norton Hall from the beginning of her employment at the university to January 4, when she was transferred to the kitchen of Grant Lee Hall. From January 4 to the time of her departure from the university on January 24 she worked exclusively at Grant Lee Hall. If Mary had been the main factor in the spread of the infection, the occurrence of cases among the two groups of students taking meals in the two different mess halls should have been very different from what it was. The shift of the students from one mess hall to another made the study of this phase of the situation rather difficult.

From such information as could be obtained the circumstances appeared to have been as follows: For several months up to January 4 about 300 students took their meals at Norton Hall; then about 140 of these students were transferred to the Grant Lee Hall mess; from January 5 to about February 5, when the exodus from the university occurred, the number of students taking meals at Norton Hall mess was about 160 and at Grant Lee Hall mess about 140. On February 8, the Norton Hall mess was closed, and after that date almost all of the resident students (about 100) remaining at the university took their meals at Grant Lee Hall mess. During the period of causation of the outbreak, about 15 resident students boarded at private homes on the campus. None of them was stricken. About 15 others took their meals regularly during that period at the Blue Bird restaurant on the campus. One of them who had meals occasionally within this period either at Norton or Grant Lee Hall mess was stricken. Another food place patronized considerably by the students was located across the street from the campus and was designated as the "hunk stand." There sandwiches, cakes, candies, and soft drinks were obtainable. Only 4 of the 28 cases especially studied were in students who had eaten at the "hunk stand" within the 30 days immediately before onset of their illness. It appeared, therefore, that if the infection causing the outbreak had been spread through food it must have been spread through that served either at Norton or Grant Lee Hall mess, or both. Mary had cooked at each place for a part of the period of causation of the outbreak.

Of the 28 cases furnishing detailed epidemiological histories, 17 were in students who had eaten at Norton Hall but not at Grant Lee within the three weeks before definite onset of illness, six had eaten at Grant Lee but not at Norton, and five had eaten at both of these mess halls. The statements obtained as to the places at which meals were taken by these 28 students during the period within which they must have become infected were as follows:

	Norton Hall	Grant Lee Hall	Blue Bird res- taur- ant	"Hunk stand"
Solely.....	13	3	0	0
Principally.....	5	5	1	0
Occasionally.....	4	3	3	4
Total.....	22	11	4	4

The dates of definite onset of illness of the cases in the 23 students who had taken meals at either Norton Hall or Grant Lee Hall to the

exclusion of the other hall are indicated in the following tabular statement:

Date of definite onset	Number of cases in students who ate at—			Date of definite onset	Number of cases in students who ate at—		
	Norton but not at Grant Lee	Grant Lee but not at Norton	Both Norton and Grant Lee		Norton but not at Grant Lee	Grant Lee but not at Norton	Both Norton and Grant Lee
Jan. 21.....	1	0	0	Feb. 10.....	0	0	1
Jan. 22.....	1	0	0	Feb. 12.....	0	1	0
Jan. 24.....	0	0	1	Feb. 14.....	0	0	1
Jan. 26.....	1	0	0	Feb. 15.....	1	1	0
Jan. 27.....	1	0	0	Feb. 17.....	1	0	0
Jan. 28.....	2	0	0	Feb. 21.....	0	0	1
Feb. 4.....	1	0	0	Feb. 22.....	0	0	1
Feb. 5.....	2	0	0	Feb. 29.....	0	1	0
Feb. 6.....	5	0	0	Mar. 1.....	0	1	0
Feb. 7.....	0	1	0				
Feb. 8.....	1	0	0	Total.....	17	6	5
Feb. 9.....	0	1	0				

If there was no error in the statement obtained to the effect that from January 4 to February 5 the number of students taking meals at the Norton Hall mess and the Grant Lee Hall mess was, respectively, 160 and 140, the disproportionately large number of cases in this group of 28 from among the students who took their meals at Norton Hall mess is peculiar and can not be explained with entire satisfaction on the evidence at hand. It may be that the exodus from the university about February 5 was more extensive among the students who for the month before had been messing at Grant Lee than among those who for the same period had been messing at Norton, so that fewer of the Grant Lee group who developed typhoid fever were available for interview at the university hospital on March 16. Such a possible explanation is supported by the results of a canvass among 86 students who had not been stricken in the outbreak. The statement from these 86 students was to the effect that within the period of 60 days covered by the months of January and February, 23 of them had eaten at Norton mess but not at Grant Lee mess, 8 had eaten at Grant Lee but not at Norton mess, and 55 had eaten either at both or at neither of these two mess halls. Thus the proportion in this "control" group giving a history of eating at Norton mess to the exclusion of Grant Lee mess, or vice versa, was approximately the same as obtained with the 28 students who developed typhoid fever.

If there was no error in the record of the number of students patronizing these two different messes, and if the exodus from the university was not proportionately greater for the Grant Lee mess group, then it appears that though some of the infection was spread in both messes, the bulk of it was spread in the Norton Hall mess (see p. 1307).

The cook, Mary, was transferred from Norton to Grant Lee mess kitchen on January 4. Unless she left some infection at Norton Hall which continued to get into the food served there for some time after she had gone to Grant Lee, it does not appear likely, in view of the general character of the outbreak and the clinical course of the cases—with, inferentially, short incubation periods—that she could have been responsible for the cases developing on and after February 4 among those who patronized Norton Hall mess to the exclusion of Grant Lee Hall mess. Unless she left some infection at Grant Lee which continued to operate there for some time after her departure from the university on January 24, it does not appear likely, in view of the same considerations, that she could have been responsible for the cases developing on and after February 21 among the patrons of Grant Lee mess.

Both of these mess halls were run on very economical principles. Almost invariably all of the food prepared on one day was disposed of on that day. Now and then a small quantity of potatoes or other vegetables might be left over, but immediately before being served again it would be thoroughly reheated. According to the information obtained, the left-over food at neither mess, within the period of causation of the outbreak, included in any instance anything such as head cheese, pudding, cake, or other food likely to be served without being reheated and in or on which typhoid bacilli might live for a number of days and perhaps multiply.

The high case incidence, the explosiveness of the outbreak, the clinical course of the cases, and all the other features of the outbreak strongly suggested heavy dosage infection with short incubation periods resulting. Such dosage is not reasonably to be expected from the contamination of food with excreta on the fingers of a "carrier" or on the feet of insects unless the food is so contaminated some time before it is eaten and is of a sort in which typhoid bacilli will multiply rapidly. According to all the information obtained, there was no likelihood of such conditions being fulfilled in the course of the handling of the foods at the mess halls involved.

Though both the clinical and the epidemiological evidence was opposed to the hypothesis of infection from a human "carrier" among the workers in the mess halls of the university, Mr. Fullerton traced the cook, Mary, to her home in a distant neighborhood, and succeeded in obtaining specimens of blood, feces, and urine from her. The laboratory examinations of these specimens by the State health department were reported negative for typhoid.

Thus, both epidemiological and bacteriological findings appear to justify the conclusion reached that cook Mary could not have been an important factor in the spread of the infection; but the possibility

of temporary "carriers" among student workers in each of the two mess halls, of course, could not be eliminated absolutely.

As the evidence was being collected to determine whether a human carrier of typhoid bacilli among the food handlers in the university mess halls could have been responsible, careful consideration was given to every possible factor which might have operated to cause, outside the mess halls, the infection of foods or beverages to which the students were exposed in the mess halls or elsewhere.

Drinking water.—There was no disproportionate case incidence from exposure to the water delivered from any tap or set of taps within the university grounds. Thus it appeared that the infection could not have been caused by local contamination of any of the water mains. As is indicated in the section under the heading "water supply" of this report, the university water supply as a whole could not have been an important vector of the infection causing the outbreak.

Of the 28 cases especially investigated, all were in students who within the 30 days prior to onset of illness had used the university supply as the sole or principal source of water for drinking purposes. Twenty-three of them had been exposed to no other drinking water. Five had used this water principally and had occasionally drunk water outside the university grounds.

Soda water.—Eighteen of the 28 cases gave a history of no exposure to soda water or other soft drinks. Ten were in students who had indulged in soft drinks at the "hunk stand," and two of these had drunk soda water also while visiting in some near-by town. As only 36 per cent of the 28 students stricken gave a history of exposure to drinking or eating at the "hunk stand" within the 30 days prior to onset of illness, and as 71 per cent of the 86 students canvassed among those who were not stricken gave a history of such exposure in January or February, it was evident that the "hunk stand" was not an important factor in the distribution of the infection.

Ice cream.—Only 2 of the 28 cases gave a history of exposure to ice cream—1 at Cumberland Gap, Tenn., and 1 at Corbin, Ky.

Raw vegetables.—Twenty-five of the 28 students furnishing the cases especially investigated were sure that they had not eaten, within the 30 days before onset of their illness, any raw vegetables such as lettuce or celery, which might have served as vectors of infection.

Raw shellfish.—None of the 28 cases gave a history of exposure to raw oysters, clams, or other shellfish.

Personal contact.—Only 5 of the 28 cases were in students who, within the period of infection, were associated with previous cases to a sufficient degree for their infection to be considered as possibly

due to personal contact. It is quite doubtful that any of these 5 cases was a secondary case.

The prevention of the occurrence of a considerable number of secondary cases from direct personal contact infection was clearly attributable to the very thorough prophylactic measures which were carried out by the attending physicians, the nurses, and the university authorities. As the cases developed, the patients were isolated promptly. The sanitary measures at the bedside, including disinfection of excreta, proper care of hands, scalding of dishes, etc., appeared to have been well enforced.

Milk.—As one possible factor after another was eliminated in the course of investigation, the evidence continued to point to milk as the major vector of the infection.

The explosive character of the outbreak, the high case incidence among the exposed, the large proportion of cases with sudden onsets of pronounced and severe symptoms, the clinical course of the cases, and the relatively low degree of resistance furnished by recent anti-typhoid vaccination—all were suggestive of heavy dosage infection such as may come from milk into which typhoid bacilli, introduced through contamination with (perhaps) highly diluted or very minute quantities of human excreta, have had time to multiply before the milk is ingested.

Raw milk was one of the staple articles of diet in the mess halls. Therefore it was entirely possible for infection in milk to reach most of the resident students.

Of the 28 students furnishing the cases investigated in detail, all stated that for the four weeks or more prior to the onset of their illness they had partaken freely of the milk served in the mess halls—25 having used it regularly as a beverage, 2 having used it in cereals regularly and also as a beverage occasionally, and 1 having used it in cereals only.

Of the 86 students in the "control" group canvassed, 76 per cent stated that they used milk as a beverage in January and February. Thus it appeared that the case incidence in the outbreak had been somewhat higher among those who were milk drinkers than among those who were not.

The milk supply of the university during the period of causation of the outbreak was obtained from four different sources and in amounts as follows: (1) The university herd, 40 gallons a day; (2) farm of W, 16 gallons a day; (3) farm of S, 20 gallons a day; and (4) dairy of C, 8 gallons of cream a week.

The cream bought from dairyman C. was all made into butter, and as no butter, but oleomargarine instead, was supplied to the mess halls, that part of the cream supply was dismissed from consideration as a vector of the infection.

According to the statements obtained, it appeared that the daily distribution of the milk from the other three sources was about as follows:

The university herd supply: Of the morning milk, 15 quarts of the whole milk were bottled and sold to families at Harrogate. Some was delivered to the households of members of the faculty on the campus. What was left was separated at the university creamery, the cream being stored for butter making and the skim milk being sent to the mess halls. The night milk (whole) was sent to the mess halls. Some of the butter made from the university herd cream was used in the households of the members of the faculty, and the remainder was sold to the trade in two or three towns in the general vicinity. The university herd milk was always run through the creamery before that from the outside sources. After the outside farm milk had been run through the creamery, the parts of the separator and the other dairy equipment which had been in contact with the milk were said to have been thoroughly scalded invariably before the next day's supply of university herd milk was processed.

Supplies from farms of W. and S.: Milk from these farms was delivered to the university creamery in the morning, the deliveries including the night milk of the day before and the morning milk of that day. Some of these parts of the supply were separated, the cream being stored for butter making, but all of the milk, whether skim or whole, from both of these outside farms was distributed to and consumed in the mess halls. It was understood from the statement of the dairy manager in our first interview with him that all the butter made from the cream derived from the farms of W. and S. went to the mess halls, but later on, after we had learned that oleomargarine instead of butter was used in the mess halls, he said there had been a misunderstanding and that the butter made from those creams was distributed as was that made from the college herd cream. It appeared certain that only a small proportion of the butter supply was made from cream separated from the milk bought from farmers W. and S., and it is quite probable that on some days none of the cream from either of these sources went into the butter-making supply. All the statements obtained were definitely to the effect that none of the milk received from farmer W. or S. was distributed to any place except the student mess halls. Whatever cream from these sources was used for butter making, was "ripened" for four to eight days before being churned.

The university creamery was fairly well equipped and appeared to be operated in a cleanly manner. The water running through the cooling room where the cans of milk were stored was exposed to contamination from near-by sewers, cesspools, and privies. There were two grossly insanitary open-surface privies on the side of the hill

within 60 feet of the dairy. These would constitute a definite source of danger in the warmer weather seasons, because flies could readily make the trip from the exposed excreta to the milk in the dairy.

If the infection causing the outbreak had been introduced into the milk—including that from the university herd—at the dairy, there would have been no reason for the outbreak to have been confined to those who took their meals at the mess halls. Therefore it appeared that if the infection was milk-borne, the vector must have been the milk obtained from farmer W. or farmer S., or both. These sources of milk were visited and inspected on the morning of March 17. The conditions surrounding the dairying business of W. were found appallingly insanitary. The residence was located in a gulch. The milk house was about 40 feet from the residence and was over a small stream fed by a near-by spring and several other springs up the gulch. No privy was provided for the use of the family. Recent deposits of human excreta were observed between the residence and the milk house. The water in the stream over which the milk house was built and in which the cans of milk were set for cooling was exposed to gross pollution from several open-surface privies and stables within a hundred yards or so up the gulch. Presumably the obviously contaminated water from W.'s spring or from the stream fed by this spring was used for washing the milk cans. The stable yard, located about 50 yards down gulch from the residence, was dirty. The cows were dirty. Incidentally it may be stated that these cows had never been tuberculin-tested. All the conditions surrounding the dairying were such as to make certain the introduction, from time to time, of human excreta into the milk sent from this farm to the university. A typhoid-fever patient or a human carrier of typhoid bacilli on this place, or at any of the several homes within the immediate vicinity up the gulch, would complete the chain of circumstances necessary to the introduction of infectious matter into the milk. There were a good many visitors to this settlement between December 1, 1923, and January 1, 1924. Upon inquiring about illness in the neighborhood, we learned that Mr. W. himself, who had most to do with the handling of the milk, became indisposed about December 10. By Christmas Day he had become ill enough to give up and go to bed. After remaining in bed for about a week, he returned to work but felt "poorly" for two or three weeks afterwards. He was not attended by a physician and his case was not diagnosed during his illness. Mr. W. was not at home at the time of our visit. Specimens of feces, urine, and blood were obtained from him a few days later and sent to the State health department for examination. The feces and urine were reported negative for typhoid, but the blood in high dilution gave a positive Widal reaction. It seems

highly probable that Mr. W.'s case was one of mild typhoid fever, and that either Mr. W. or some visitor from whom he contracted the disease was the source and the milk from his farm the vector of the infection causing the outbreak at the university.

The conditions surrounding the dairying of farmer S. were also grossly insanitary but not so pronounced as those at the place of farmer W. No history was obtained of recent illness suggesting typhoid in the household or immediate neighborhood of farmer S.

There was no way of ascertaining the proportion in which the milk received from W. was distributed to each of the mess halls involved. It is quite possible that most of it went to Norton Hall mess. This seems to offer the most probable explanation of the apparent disproportion of cases among the students who took their meals at that mess. (See pp. 1307 to 1308.)

If butter was made from cream separated from milk received from both W. and S. and was sent to the faculty households and the extra-university trade, the explanation of the entire escape from the outbreak by the consumers of that butter might be found in one of the following hypotheses:

- (1) The organisms of the strain causing the outbreak were not sufficiently virulent to cause disease unless ingested in large number.

- (2) None of the cans of milk containing the infection (and it is quite reasonable to believe that the milk was not uniformly infected so as to have typhoid bacilli in every 5-gallon lot) was drawn upon for cream used in the butter making.

- (3) The typhoid bacilli of the strain operative were not sufficiently vigorous to survive in the souring cream.

CONCLUSION

The practical conclusion based on the findings was (March 17, 1924) and is (April 11, 1925) that the outbreak was caused by infection in a milk supply obtained from a farm within the vicinity of the university and consumed by the students taking their meals in the mess halls of the university.

RECOMMENDATIONS

The recommendations submitted on the evening of March 17, 1924, to the president of the university, several members of the faculty, the two attending physicians, and the head of the Red Cross force coming from Atlanta, Ga., to assist (and who did assist with a high degree of efficiency) in the study and the control of the outbreak, were as follows:

- (1) Begin at once and continue pasteurization of all milk to be used at eating places at the university and discontinue as soon as practicable the use of all milk except that obtained from the univer-

sity dairy herd until radical sanitary improvements can be made on the dairy farms outside the university grounds from which the auxiliary supplies are obtained.

(2) Insist upon antityphoid vaccination of all students who did not have typhoid fever in the recent outbreak, or who have not been vaccinated against typhoid fever within the last six months, as they return to or enter the university within the next 12 months.

(3) Continue rigid sanitary precautions to prevent the spread of infection from known typhoid-fever patients for at least three weeks after temperature of patient becomes normal, and, if practicable, until two bacteriological examinations show them free from infection.

(4) Disinfect at once and abolish as soon as possible all insanitary (open) privies within the university grounds, and replace them either with water-closets, connected with the sewerage system, or with sanitary (fly-tight) privies.

(5) Have rigid cleanliness carried out in kitchens and dining halls, including thorough scalding or sterilization of used dishes and eating utensils, and cleanliness of hands and clothing of workers.

(6) Keep one or more public health nurses at the university to help carry out sanitary measures and to instruct in hygiene.

(7) Have a thorough overhauling of water and sewerage systems as soon as practicable to make them more efficient.

(8) Have food handlers now at the university, and others to be employed, examined so far as may be practicable to determine their freedom from infection.

POSTSCRIPT

According to reports received from the university, it appears that the above recommendations have been carried out in the main. Pasteurization of the milk supply was begun at once and has been continued.

In a letter dated March 30, 1925, from the president of the university is the statement that not a case of typhoid fever has occurred at the Lincoln Memorial University since March 17, 1924.

With the sanitary measures already carried out, and expected to be continued, and with the additional measures which readily can be and presumably will be carried out, there is every reason to believe that Lincoln Memorial University is now and will be hereafter a safer place at which to live, so far as exposure to infectious disease is concerned, than it was previous to the outbreak of typhoid fever described in this report.

The occurrence of this outbreak indicates (1) the critical importance of pasteurization of all public or community milk supplies; (2) the wisdom of making practical sanitation a part of the curriculum of every seat of learning; and (3) the need of having in our rural communities well-organized whole-time local health service.

DEATH RATES IN A GROUP OF INSURED PERSONS

COMPARISON OF PRINCIPAL CAUSES OF DEATH, MARCH AND APRIL, 1925, AND APRIL AND YEAR, 1924

The accompanying table is taken from the Statistical Bulletin for May, 1925, published by the Metropolitan Life Insurance Co. It presents the mortality experience of the company for March and April, 1925, and for April and year, 1924. The rates are based on a strength of approximately 16,000,000 insured persons.

Only one important disease, influenza, registered a considerably higher death rate in this group for April this year than for the same month last year; whereas large declines are shown for tuberculosis, organic heart diseases, pneumonia, and diarrheal complaints, and smaller reductions for typhoid fever, cancer, and puerperal causes. The death rate for April, 1925, for all causes was 10.1 per 1,000, as compared with 10.8 for April, 1924—a reduction of 6 per cent.

The record for fatal accidents was less favorable, showing an increase over the corresponding period of last year. Automobile fatalities during April, as in March, recorded an increase this year.

Death rates (annual basis) for principal causes per 100,000 lives exposed, March and April, 1925, and April and year, 1924

[Industrial department, Metropolitan Life Insurance Co.]

Cause of death	Death rate per 100,000 lives exposed ¹			
	April, 1925	March, 1925	April, 1924	Year 1924 ²
Total, all causes.....	1,014.9	1,025.6	1,076.5	907.5
Typhoid fever.....	2.0	2.4	2.8	4.4
Measles.....	4.5	3.4	14.8	7.2
Scarlet fever.....	4.8	6.1	6.7	4.4
Whooping cough.....	8.8	6.9	11.6	7.4
Diphtheria.....	12.8	11.5	12.6	13.2
Influenza.....	44.5	47.7	29.1	16.0
Tuberculosis (all forms).....	105.4	113.4	120.5	104.5
Tuberculosis of respiratory system.....	92.3	99.3	106.1	92.6
Cancer.....	70.0	69.9	73.1	70.4
Diabetes mellitus.....	16.1	17.9	16.9	14.9
Cerebral hemorrhage.....	56.6	58.3	60.5	60.2
Organic diseases of heart.....	138.5	146.1	147.5	123.7
Pneumonia (all forms).....	134.0	140.4	148.5	88.8
Other respiratory diseases.....	16.8	18.7	19.2	13.9
Diarrhea and enteritis.....	17.5	16.9	20.8	32.2
Bright's disease (chronic nephritis).....	76.1	76.8	75.8	65.5
Puerperal state.....	18.9	19.2	19.8	16.8
Suicides.....	7.2	7.7	8.1	7.2
Homicides.....	7.7	6.5	7.5	7.1
Other external causes (excluding suicides and homicides).....	57.3	52.5	52.8	62.7
Traumatism by automobile.....	13.6	14.0	13.0	15.7
All other causes.....	215.2	203.3	227.9	187.0

¹ All figures include infants insured under 1 year of age.

² Based on provisional estimate of lives exposed to risk in 1924.

ABSTRACTS OF CURRENT PUBLIC HEALTH COURT DECISIONS

Compensation granted under workmen's compensation act for weakened resistance due to occupation resulting in grinder's consumption.—(Connecticut Supreme Court of Errors.) The plaintiff was employed

by the defendant company for a number of years in wet grinding. In the plaintiff's occupation of tool grinder, water, laden with minute particles of grindstone and steel, was constantly splashed upon the operator and the gritty matter taken into the lungs through the nose and mouth. The lodgement of these particles in the lungs produced in the plaintiff a disease known as pneumoconiosis which developed into a mixed infection of a tubercular, staphylococcic, and streptococcic nature. The so-called occupational disease amendments of the workmen's compensation act read in part as follows:

If an injury arises out of and in the course of the employment, it shall be no bar to a claim for compensation that it can not be traced to a definite occurrence which can be located in point of time and place. * * *

The word "injury" as the same is used in said chapter shall be construed to include any disease which is due to causes peculiar to the occupation and which is not of a contagious, communicable, or mental nature.

The court held that the injury in this case was a weakened resistance to infection called pneumoconiosis, which injury was not communicable, and the fact that grinder's consumption (a communicable disease) developed from the injury did not bar recovery of compensation. The court said in part:

The consequent effects of the weakened resistance to infection in this case, to wit, the infection producing grinder's consumption, is not the injury compensated for; it is the weakened resistance to infection which is the injury compensated for; the consequences of that condition when infection occurs is deemed a part of the weakened resistance to infection (*Kovaliski v. Collins Co. et al.*, 128 Atl. 288).

County area plan law for control and suppression of tuberculosis in cattle held valid.—(Minnesota Supreme Court.) Chapter 269, Laws of 1923, authorizing counties to put into effect the county area plan for the control and suppression of tuberculosis in cattle was held valid, the court stating that the object of the statute was to promote and preserve the public health. (*Schulte et al. v. Fitch et al.*, 202 N. W. 719.)

AMERICAN DIETETIC ASSOCIATION TO MEET IN OCTOBER

The annual convention of the American Dietetic Association will be held at the Edgewater Beach Hotel, Chicago, Ill., on October 12, 13, 14, and 15, 1925.

The program is being arranged to include the various branches of the food problem. The first three days will be devoted to a program of speeches, discussions, and exhibits, while the last day will be given over to a series of trips having for their purpose the demonstration of the practical application of dietetic knowledge, especially the results in infant feeding achieved by the Infant Welfare Organization of Chicago, stations of which organization will be open for inspection.

DEATHS DURING WEEK ENDED JUNE 6, 1925

Summary of information received by telegraph from industrial insurance companies for week ended June 6, 1925, and corresponding week of 1924. (From the Weekly Health Index, June 9, 1925, issued by the Bureau of the Census, Department of Commerce)

	Week ended June 6, 1925	Corresponding Week, 1924
Policies in force.....	60, 133, 708	56, 256, 504
Number of death claims.....	10, 774	11, 000
Death claims per 1,000 policies in force, annual rate.....	9.3	10.2

Deaths from all causes in certain large cities of the United States during the week ended June 6, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924. (From the Weekly Health Index, June 9, 1925, issued by the Bureau of the Census, Department of Commerce)

City	Week ended June 6, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate, week ended June 6, 1925 ¹
	Total deaths	Death rate ²		Week ended June 6, 1925	Corresponding week, 1924	
Total (64 cities).....	7,425	14.0	12.3	899	741	-----
Akron.....	51	-----	-----	3	11	33
Albany ³	29	12.6	18.5	2	5	44
Atlanta.....	105	-----	-----	12	8	-----
Baltimore ⁴	235	18.4	13.5	20	28	58
Birmingham.....	63	16.0	12.5	10	6	-----
Boston.....	232	18.4	13.6	41	21	109
Bridgeport.....	33	-----	-----	2	3	32
Buffalo.....	178	16.8	12.9	35	19	142
Cambridge.....	28	13.0	10.7	6	0	103
Camden.....	33	13.4	16.1	5	4	82
Chicago ⁵	724	12.6	10.8	81	73	72
Cincinnati.....	136	17.3	14.6	7	13	41
Cleveland.....	271	15.1	9.8	39	20	97
Columbus.....	92	17.1	11.7	10	4	94
Dallas.....	47	12.7	11.1	12	9	-----
Dayton.....	53	16.0	10.2	8	4	64
Denver.....	80	14.8	13.0	3	11	-----
Des Moines.....	32	11.2	11.1	3	2	51
Detroit.....	332	-----	-----	67	43	113
Duluth.....	24	11.3	12.0	3	5	63
Erie.....	28	-----	-----	5	2	98
Fall River ¹	22	9.5	16.4	2	9	29
Flint.....	20	8.0	8.8	4	2	66
Fort Worth.....	23	7.9	8.4	2	1	-----
Grand Rapids.....	39	13.3	10.5	5	1	78
Houston.....	40	12.6	14.7	7	6	-----
Indianapolis.....	114	16.6	11.3	11	6	76
Jersey City.....	86	14.2	12.5	10	13	70
Kansas City.....	26	11.0	15.0	3	3	63
Kansas City, Mo.....	93	13.2	11.5	4	9	-----
Los Angeles.....	269	-----	-----	41	34	114
Louisville.....	95	19.1	14.7	3	6	26
Lowell.....	27	12.1	12.2	3	3	52
Lynn.....	28	13.9	15.6	4	4	106
Memphis.....	69	20.6	16.9	14	-----	-----
Milwaukee.....	113	11.7	11.6	27	19	123
Minneapolis.....	102	12.5	12.7	8	11	43
Nashville ¹	39	14.9	16.3	5	2	-----
New Bedford.....	24	9.3	9.0	5	2	83
New Haven.....	70	20.4	8.0	4	3	32
New Orleans.....	156	19.6	15.5	24	12	-----
New York.....	1,598	13.7	12.4	200	185	80
Bronx Borough.....	181	10.5	9.3	15	14	52
Brooklyn Borough.....	564	13.2	11.3	81	64	85
Manhattan Borough.....	698	15.9	14.7	85	82	85
Queens Borough.....	127	11.5	10.2	16	19	79
Richmond Borough.....	38	14.8	21.5	3	6	54

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1924. Cities left blank are not in the registration area for births.

³ Deaths for week ended Friday, June 5, 1925.

Deaths from all causes in certain large cities of the United States during the week ended June 6, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924. (From the Weekly Health Index, June 9, 1925, issued by the Bureau of the Census, Department of Commerce)—Continued

City	Week ended June 6, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate, week ended June 6, 1925
	Total deaths	Death rate		Week ended June 6, 1925	Corresponding week, 1924	
Newark, N. J.	122	14.1	11.9	22	10	100
Norfolk	31			9	5	160
Oakland	44	9.0	11.2	8	6	94
Oklahoma City	21			3	1	
Omaha	38	9.4	10.3	6	4	58
Paterson	40	14.7	12.2	9	4	151
Philadelphia	504	13.3	12.3	54	54	68
Pittsburgh	218	18.0	14.7	25	22	88
Portland, Oreg.	63	11.6	13.3	3	4	31
Providence	72	15.3	14.5	6	8	48
Richmond	64	17.9	16.7	4	7	49
Rochester	70	11.0	8.8	3	8	24
St. Louis	210	13.3	13.7	15	15	
St. Paul	57	12.1	9.6	4	6	34
Salt Lake City ¹	22	8.8	10.5	2	5	31
San Antonio	54	14.2	20.2	16	16	
San Francisco	153	14.3	14.8	6	6	35
Schenectady	26	13.3	9.9	4	1	113
Seattle	79			5	1	51
Somerville	32	16.4	12.5	5	1	134
Spokane	27	12.9	12.5	3	2	65
Springfield, Mass.	39	13.3	10.9	6	6	89
Syracuse	36	9.8	13.9	4	6	50
Tacoma	27	13.5	9.6	2	3	48
Toledo	90	16.3	12.5	12	5	109
Trenton	42	16.6	12.5	3	2	49
Washington, D. C.	191	20.0	9.5	29	6	163
Waterbury	27			1	6	22
Wilmington, Del.	29	12.4	10.0	6	4	137
Worcester	50	13.1	11.2	4	1	46
Yonkers	28	13.1	9.0	4	1	88
Youngstown	36	11.7	9.1	3	3	38

¹ Deaths for week ended Friday, June 5, 1925.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Week Ended June 13, 1925

ALABAMA		ARKANSAS—continued	
	Cases		Cases
Cerebrospinal meningitis.....	3	Tuberculosis.....	18
Chicken pox.....	24	Typhoid fever.....	21
Diphtheria.....	7	Whooping cough.....	21
Dysentery.....	61		
Influenza.....	25	CALIFORNIA	
Malaria.....	87	Cerebrospinal meningitis:	
Measles.....	12	Long Beach.....	1
Mumps.....	25	Los Angeles.....	1
Pellagra.....	34	Diphtheria.....	91
Pneumonia.....	39	Influenza.....	13
Poliomyelitis.....	2	Lethargic encephalitis:	
Scarlet fever.....	19	Riverside.....	1
Smallpox.....	88	San Francisco.....	1
Tuberculosis.....	71	Measles.....	62
Typhoid fever.....	54	Poliomyelitis:	
Whooping cough.....	58	Berkeley.....	1
		Claremont.....	1
ARIZONA		Long Beach.....	1
Chicken pox.....	7	Los Angeles.....	3
Measles.....	29	Los Angeles County.....	3
Mumps.....	4	Monrovia.....	1
Poliomyelitis.....	3	Monterey.....	1
Scarlet fever.....	15	Oakland.....	1
Tuberculosis.....	47	San Diego.....	1
Whooping cough.....	9	San Francisco.....	3
		Scarlet fever.....	95
ARKANSAS		Smallpox:	
Chicken pox.....	18	Glendale.....	8
Hookworm disease.....	3	Los Angeles.....	36
Influenza.....	11	Los Angeles County.....	6
Malaria.....	151	Oakland.....	12
Measles.....	4	Scattering.....	26
Mumps.....	31	Typhoid fever.....	12
Ophthalmia neonatorum.....	1		
Paratyphoid fever.....	1	COLORADO	
Pellagra.....	37	(Exclusive of Denver)	
Poliomyelitis.....	1	Chicken pox.....	4
Scarlet fever.....	2	Diphtheria.....	6
Smallpox.....	5	Measles.....	5
Trachoma.....	2	Mumps.....	8

COLORADO—continued

	Cases
Pneumonia.....	5
Scarlet fever.....	7
Septic sore throat.....	1
Rocky Mountain spotted fever—Denver.....	1
Tuberculosis.....	27
Typhoid fever.....	1

CONNECTICUT

Cerebrospinal meningitis.....	1
Chicken pox.....	47
Diphtheria.....	31
German measles.....	40
Influenza.....	5
Lethargic encephalitis.....	2
Measles.....	279
Mumps.....	13
Ophthalmia neonatorum.....	2
Pneumonia (all forms).....	43
Scarlet fever.....	35
Septic sore throat.....	1
Tetanus.....	1
Tuberculosis (all forms).....	33
Typhoid fever.....	5
Whooping cough.....	119

DELAWARE

Chicken pox.....	5
Diphtheria.....	3
Measles.....	12
Pneumonia.....	1
Scarlet fever.....	1
Tuberculosis.....	9

FLORIDA

Diphtheria.....	10
Influenza.....	1
Malaria.....	5
Mumps.....	3
Paratyphoid fever.....	2
Pneumonia.....	1
Poliomyelitis.....	2
Scarlet fever.....	5
Smallpox.....	9
Tuberculosis.....	8
Typhoid fever.....	15
Whooping cough.....	6

GEORGIA

Chicken pox.....	12
Diphtheria.....	8
Dysentery.....	63
Influenza.....	42
Malaria.....	62
Measles.....	21
Mumps.....	25
Pellagra.....	10
Pneumonia.....	21
Scarlet fever.....	4
Septic sore throat.....	7
Smallpox.....	32
Tuberculosis.....	24
Typhoid fever.....	69
Whooping cough.....	33

ILLINOIS

	Cases
Cerebrospinal meningitis—Cook County.....	1
Diphtheria:	
Cook County.....	59
Scattering.....	21
Influenza.....	11
Measles.....	1,215
Pneumonia:	
Chicago.....	140
Scattering.....	51
Poliomyelitis:	
Kane County.....	1
Williamson County.....	1
Scarlet fever:	
Cook County.....	147
Kane County.....	7
McLean County.....	7
Sangamon County.....	6
Scattering.....	40
Smallpox:	
Cook County.....	8
Franklin County.....	17
Pulaski County.....	5
Vermillion County.....	5
Scattering.....	15
Tuberculosis.....	189
Typhoid fever:	
Cook County.....	7
Fayette County.....	9
Scattering.....	18
Whooping cough.....	239

INDIANA

Cerebrospinal meningitis—Union County.....	1
Chicken pox.....	86
Diphtheria.....	16
Influenza.....	23
Measles.....	156
Pneumonia.....	2
Scarlet fever.....	33
Smallpox.....	80
Tuberculosis.....	70
Typhoid fever.....	7
Whooping cough.....	43

IOWA

Diphtheria.....	14
Scarlet fever.....	9
Smallpox.....	6
Typhoid fever.....	1

KANSAS

Cerebrospinal meningitis.....	1
Chicken pox.....	71
Diphtheria.....	12
German measles.....	3
Influenza.....	22
Measles.....	14
Mumps.....	103
Pneumonia.....	36
Rabies.....	1
Scabies.....	1
Scarlet fever.....	39

KANSAS—continued		MASSACHUSETTS—continued	
	Cases		Cases
Smallpox.....	9	Septic sore throat.....	1
Tetanus.....	1	Tetanus.....	1
Tuberculosis.....	45	Trachoma.....	1
Typhoid fever.....	5	Tuberculosis (pulmonary).....	125
Whooping cough.....	105	Tuberculosis (other forms).....	17
		Typhoid fever.....	8
		Whooping cough.....	107
LOUISIANA		MICHIGAN	
Diphtheria.....	11	Diphtheria.....	67
Influenza.....	16	Measles.....	786
Lethargic encephalitis.....	2	Pneumonia.....	111
Malaria.....	9	Scarlet fever.....	175
Pneumonia.....	32	Smallpox.....	39
Scarlet fever.....	7	Tuberculosis.....	54
Smallpox.....	9	Typhoid fever.....	6
Tuberculosis.....	35	Whooping cough.....	236
Typhoid fever.....	55		
Whooping cough.....	15		
MAINE		MINNESOTA	
Cerebrospinal meningitis.....	1	Chicken pox.....	135
Chicken pox.....	7	Diphtheria.....	49
Dysentery.....	1	Measles.....	44
German measles.....	5	Pneumonia.....	2
Measles.....	8	Scarlet fever.....	151
Mumps.....	20	Smallpox.....	5
Pneumonia.....	2	Tuberculosis.....	49
Scarlet fever.....	13	Typhoid fever.....	3
Tuberculosis.....	4	Whooping cough.....	24
Typhoid fever.....	1		
Whooping cough.....	8		
MARYLAND ¹		MISSISSIPPI	
Chicken pox.....	130	Diphtheria.....	6
Diarrhea and enteritis.....	2	Scarlet fever.....	2
Diphtheria.....	17	Smallpox.....	18
German measles.....	2	Typhoid fever.....	26
Influenza.....	4		
Lethargic encephalitis.....	1		
Measles.....	57		
Mumps.....	70		
Paratyphoid fever.....	3		
Pneumonia:			
Broncho.....	15		
Lobar.....	22		
Polloomyelitis.....	2		
Scarlet fever.....	23		
Septic sore throat.....	3		
Tetanus.....	2		
Tuberculosis.....	86		
Typhoid fever.....	10		
Whooping cough.....	108		
MASSACHUSETTS		MISSOURI	
Cerebrospinal meningitis.....	2	(Exclusive of Kansas City)	
Chicken pox.....	152	Chicken pox.....	52
Conjunctivitis (suppurative).....	12	Diphtheria.....	49
Diphtheria.....	68	Influenza.....	6
German measles.....	288	Measles.....	25
Influenza.....	5	Mumps.....	36
Measles.....	881	Pneumonia.....	4
Mumps.....	30	Rabies.....	3
Ophthalmia neonatorum.....	28	Scarlet fever.....	116
Pneumonia (lobar).....	77	Septic sore throat.....	3
Scarlet fever.....	114	Smallpox.....	26
		Tetanus.....	1
		Trachoma.....	3
		Tuberculosis.....	58
		Typhoid fever.....	8
		Whooping cough.....	47
		MONTANA	
		Chicken pox.....	4
		Diphtheria.....	8
		German measles.....	11
		Mumps.....	8
		Rocky Mountain spotted fever—Miles City.....	1
		Scarlet fever.....	21
		Septic sore throat.....	1
		Smallpox.....	3
		Tuberculosis.....	2
		Typhoid fever.....	1
		Whooping cough.....	11

¹ Week ended Friday.

NEBRASKA

	Cases
Chicken pox.....	13
Diphtheria.....	4
Measles.....	3
Mumps.....	4
Scarlet fever.....	6
Smallpox.....	31
Tuberculosis.....	1
Whooping cough.....	9

NEW JERSEY

Cerebrospinal meningitis.....	3
Chicken pox.....	165
Diphtheria.....	58
Influenza.....	3
Measles.....	487
Pneumonia.....	96
Scarlet fever.....	120
Smallpox.....	7
Typhoid fever.....	50
Whooping cough.....	189

NEW MEXICO

Chicken pox.....	1
Diphtheria.....	3
Measles.....	5
Mumps.....	11
Pneumonia.....	1
Puerperal septicemia.....	6
Rabies in animals.....	2
Scarlet fever.....	1
Tuberculosis.....	16
Typhoid fever.....	6
Whooping cough.....	9

NEW YORK

(Exclusive of New York City)

Cerebrospinal meningitis.....	1
Diphtheria.....	90
Influenza.....	15
Lethargic encephalitis.....	1
Measles.....	728
Pneumonia.....	164
Poliomyelitis.....	3
Scarlet fever.....	192
Smallpox.....	11
Typhoid fever.....	21
Whooping cough.....	215

NORTH CAROLINA

Cerebrospinal meningitis.....	2
Chicken pox.....	68
Diphtheria.....	18
German measles.....	2
Measles.....	4
Poliomyelitis.....	6
Scarlet fever.....	12
Smallpox.....	37
Typhoid fever.....	36
Whooping cough.....	159

OKLAHOMA

(Exclusive of Oklahoma City and Tulsa)

Cerebrospinal meningitis—Okmulgee.....	1
Chicken pox.....	14
Diphtheria.....	9

1 Deaths.

OKLAHOMA—continued

	Cases
Influenza.....	27
Poliomyelitis—Bryan.....	2
Scarlet fever.....	12
Smallpox.....	6
Typhoid fever.....	38
Whooping cough.....	23

OREGON

Cerebrospinal meningitis.....	4
Chicken pox.....	16
Diphtheria:	
Portland.....	14
Scattering.....	4
Influenza.....	1
Malaria.....	1
Measles.....	1
Mumps.....	13
Pneumonia.....	12
Rocky Mountain spotted fever.....	1
Scarlet fever.....	13
Smallpox.....	8
Tuberculosis.....	8
Typhoid fever.....	1
Whooping cough.....	19

SOUTH DAKOTA

Diphtheria.....	3
Mumps.....	1
Pneumonia.....	1
Scarlet fever.....	16
Tuberculosis.....	3
Typhoid fever.....	1
Whooping cough.....	8

TEXAS

Cerebrospinal meningitis.....	1
Chicken pox.....	29
Diphtheria.....	8
Dysentery (epidemic).....	58
Influenza.....	20
Measles.....	14
Mumps.....	32
Pellagra.....	33
Pneumonia.....	4
Poliomyelitis.....	4
Rabies in man.....	1
Scarlet fever.....	10
Smallpox.....	13
Trachoma.....	5
Tuberculosis.....	16
Typhoid fever.....	14
Whooping cough.....	47

VERMONT

Chicken pox.....	26
Diphtheria.....	1
Measles.....	47
Mumps.....	62
Scarlet fever.....	7
Whooping cough.....	24

VIRGINIA

Smallpox:	
Accomac County.....	2
Craig County.....	2

WASHINGTON		Cases
Chicken pox.....		60
Diphtheria.....		18
German measles.....		16
Measles.....		5
Mumps.....		49
Scarlet fever.....		30
Smallpox.....		34
Tuberculosis.....		51
Typhoid fever.....		3
Whooping cough.....		125

WEST VIRGINIA	
Diphtheria.....	1
Scarlet fever.....	15
Smallpox.....	3
Typhoid fever.....	2

WISCONSIN	
Milwaukee:	
Chicken pox.....	42
Diphtheria.....	11
German measles.....	36
Measles.....	145
Mumps.....	52
Pneumonia.....	9
Scarlet fever.....	6
Smallpox.....	6

WISCONSIN—continued		Cases
Milwaukee—Continued.		
Tuberculosis		26
Whooping cough		33
Scattering:		
Cerebrospinal meningitis		1
Chicken pox		146
Diphtheria		30
German measles		188
Influenza		47
Lethargic encephalitis		1
Measles		221
Mumps		67
Pneumonia		15
Scarlet fever		146
Smallpox		32
Tuberculosis		27
Whooping cough		82

WYOMING	
Chicken pox.....	15
Diphtheria.....	5
Mumps.....	4
Rocky Mountain spotted fever.....	3
Scarlet fever.....	10
Smallpox.....	1
Typhoid fever.....	1
Whooping cough.....	3

Reports for Week Ended June 6, 1925

DISTRICT OF COLUMBIA		Cases
Chicken pox.....	.....	9
Diphtheria.....	.....	10
Measles.....	.....	27
Pneumonia.....	.....	9
Scarlet fever.....	.....	23
Smallpox.....	.....	1
Tuberculosis.....	.....	23
Whooping cough.....	.....	15

MISSOURI	
(Exclusive of Kansas City)	
Cerebrospinal meningitis.....	2
Chicken pox.....	38
Diphtheria.....	50
Influenza.....	4
Measles.....	10
Mumps.....	71
Ophthalmia neonatorum.....	1
Pneumonia.....	10
Rabies.....	1
Scarlet fever.....	135
Smallpox.....	23
Trachoma.....	4
Tuberculosis.....	59
Typhoid fever.....	8
Whooping cough.....	29

NEBRASKA	
Chicken pox.....	20
Diphtheria.....	6
Measles.....	2
Mumps.....	6
Scarlet fever.....	6
Smallpox.....	26

NEBRASKA—continued		Cases
Tuberculosis.....	2	
Whooping cough.....	18	

NORTH DAKOTA	
Chicken pox.....	16
Diphtheria.....	1
German measles.....	1
Mumps.....	18
Pneumonia.....	3
Polio-myelitis.....	4
Scarlet fever.....	20
Smallpox.....	6
Whooping cough.....	6

TEXAS	
Cerebrospinal meningitis.....	1
Chicken pox.....	111
Dengue fever.....	1
Diphtheria.....	24
Dysentery (epidemic).....	12
Influenza.....	20
Measles.....	34
Mumps.....	69
Pappataci fever.....	5
Paratyphoid fever.....	3
Pellagra.....	12
Pneumonia.....	8
Rabies in man.....	2
Scarlet fever.....	45
Smallpox.....	97
Trachoma.....	2
Tuberculosis.....	44
Typhoid fever.....	29
Typhus fever.....	1
Whooping cough.....	51

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Cerebro-spinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Polio-myelitis	Scarlet fever	Small-pox	Typhoid fever
<i>May, 1925</i>										
Arkansas.....	0	9	175	320	110	97	0	12	18	44
Connecticut.....	4	103	22		985		1	364	2	19
Indiana.....	3	84	257				1	703		39
Michigan.....	0	239	35		2,331	0	6	1,321	86	33
Missouri.....	2	330	36	34	142	0	0	799	93	20
Vermont.....	0	12	0	0	52	0	0	41	0	0
Wisconsin.....	3	140	778	0	1,718	0	3	541	243	9

PLAGUE-ERADICATIVE MEASURES IN THE UNITED STATES

The following items were taken from the reports of plague-eradication measures from the cities named:

Los Angeles, Calif.

Week ended May 30, 1925:

Number of rats examined.....	2,542
Number of rats found to be plague infected.....	0
Number of squirrels examined.....	1,170
Number of squirrels found to be plague infected.....	0

Totals, Nov. 5, 1924, to May 30, 1925:

Number of rats examined.....	106,951
Number of rats found to be plague infected.....	187
Number of squirrels examined.....	16,094
Number of squirrels found to be plague infected.....	9

Date of discovery of last plague-infected rodent, May 26, 1925.

Date of last human case, Jan. 15, 1925.

Oakland, Calif.

(Including other East Bay communities)

Week ended May 30, 1925:

Number of rats trapped.....	1,739
Number of rats found to be plague infected.....	0
Number of squirrels examined.....	712
Number of squirrels found to be plague infected.....	0

Totals:

Number of rats trapped Jan. 1 to May 30, 1925.....	49,820
Number of rats found to be plague infected.....	21
Number of squirrels examined May 1 to May 30, 1925.....	1,985
Number of squirrels found to be plague infected.....	0

Date of discovery of last plague-infected rat, Mar. 4, 1925.

Date of last human case, Sept. 10, 1919.

New Orleans, La.

Week ended May 30, 1925:

Number of vessels inspected.....	353
Number of inspections made.....	1, 021
Number of vessels fumigated with cyanide gas.....	22
Number of rodents examined for plague.....	5, 015
Number of rodents found to be plague infected.....	0

Totals, Dec. 5, 1924, to May 30, 1925:

Number of rodents examined for plague.....	113, 660
Number of rodents found to be plague infected.....	12

Date of discovery of last plague-infected rat, Jan. 17, 1925.

Date of last human case occurring in New Orleans, Aug. 20, 1920.

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

Diphtheria.—For the week ended May 30, 1925, 34 States reported 1,019 cases of diphtheria. For the week ended May 31, 1924, the same States reported 1,384 cases of this disease. Ninety-eight cities, situated in all parts of the country and having an aggregate population of more than 28,100,000, reported 819 cases of diphtheria for the week ended May 30, 1925. Last year, for the corresponding week, they reported 859 cases. The estimated expectancy for these cities was 807 cases. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty-one States reported 4,987 cases of measles for the week ended May 30, 1925, and 7,778 cases of this disease for the week ended May 31, 1924. Ninety-eight cities reported 3,238 cases of measles for the week this year, and 2,843 cases last year.

Scarlet fever.—Scarlet fever was reported for the week as follows: 34 States—this year, 2,549 cases; last year, 2,391 cases; 98 cities—this year, 1,521; last year, 1,189; estimated expectancy, 875 cases.

Smallpox.—For the week ended May 30, 1925, 34 States reported 738 cases of smallpox. Last year, for the corresponding week, they reported 858 cases. Ninety-eight cities reported smallpox for the week as follows: 1925, 243 cases; 1924, 289 cases; estimated expectancy, 115 cases. These cities reported 10 deaths from smallpox for the week this year.

Typhoid fever.—Three hundred and forty-eight cases of typhoid fever were reported for the week ended May 30, 1925, by 33 States. For the corresponding week of 1924 the same States reported 237 cases. Ninety-eight cities reported 86 cases of typhoid fever for the week this year, and 76 cases for the corresponding week last year. The estimated expectancy for these cities was 78 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia (combined) were reported for the week by 98 cities as follows: 1925, 732 deaths; 1924, 643 deaths.

City reports for week ended May 30, 1925

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1915 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland.....	73, 129	3	1	0	0	0	0	11	2
New Hampshire:									
Concord.....	22, 408	0	0	0	0	0	1	0	1
Vermont:									
Barre.....	10, 008	1	0	0	0	0	0	8	1
Burlington.....	23, 613	2	1	0	0	0	5	5	1
Massachusetts:									
Boston.....	770, 400		54	29	3	1	235		20
Fall River.....	120, 912	1	3	2	0	0	2	0	2
Springfield.....	144, 227	3	3	1	1	1	8	12	0
Worcester.....	191, 927	9	4	2	0	0	16	0	5
Rhode Island:									
Pawtucket.....	68, 799	3	1	0	0	0	1	0	0
Providence.....	242, 378	0	10	2	0	1	2	0	12
Connecticut:									
Bridgeport.....	143, 555	6	4	3	0	0	15	1	1
Hartford.....	138, 036		6						
New Haven.....	172, 967	1	4	1	0	0	63	0	1
MIDDLE ATLANTIC									
New York:									
Buffalo.....	536, 718	5	13	10	3	0	252	1	14
New York.....	5, 927, 625	257	254	237	15	13	213	31	162
Rochester.....	317, 867	1	7	4		0	90	2	10
Syracuse.....	184, 511	17	7	7		0	13	15	3
New Jersey:									
Camden.....	124, 157	1	3	6		0	31	1	5
Newark.....	438, 699	33	15	14	2	0	91	8	16
Trenton.....	127, 390	17	5	0	0	0	3	0	5
Pennsylvania:									
Philadelphia.....	1, 922, 788	54	62	130		2	345	18	55
Pittsburgh.....	613, 442	15	21	4		3	258	6	17
Reading.....	110, 917	0	2	4	0	0	96	10	1
Scranton.....	140, 636	1	3	0	0	1	0	0	5
EAST NORTH CENTRAL									
Ohio:									
Cincinnati.....	406, 312	7	8	9		5	1	2	8
Cleveland.....	888, 519	95	20	25	1	2	18	9	13
Columbus.....	261, 082	3	3	4		4	9	0	6
Toledo.....	268, 338	31	4	6		1	122	0	3
Indiana:									
Fort Wayne.....	93, 573	4	2	0	0	0	7	0	1
Indianapolis.....	342, 718		6						
South Bend.....	76, 709	6	1	3	0	0	5	0	1
Terre Haute.....	68, 939	4	1	1	0	0	47	0	2
Illinois:									
Chicago.....	2, 886, 121	83	99	60	9	4	645	16	59
Cicero.....	55, 968		2						
Springfield.....	61, 833	10	1	2	0	0	43	30	2
Michigan:									
Detroit.....	995, 668	61	45	24	2	3	28	19	35
Flint.....	117, 968	2	4	0	0	0	36	0	1
Grand Rapids.....	145, 947	2	2	0	0	0	132	0	4

¹ Population Jan. 1, 1920.

City reports for week ended May 30, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST NORTH CENTRAL—continued									
Wisconsin:									
Madison.....	42,519	4	0	0	0	0	4	9	1
Milwaukee.....	484,595	22	11	12	0	0	211	64	21
Racine.....	64,393	6	1	3	0	0	0	5	2
Superior.....	139,671	0	1	0	0	—	0	0	—
WEST NORTH CENTRAL									
Minnesota:									
Duluth.....	106,289	7	1	0	0	0	0	1	2
Minneapolis.....	409,125	48	14	22	1	22	4	4	4
St. Paul.....	241,891	45	14	9	0	0	14	32	5
Iowa:									
Davenport.....	61,262	0	1	1	0	—	3	0	—
Sioux City.....	79,662	11	1	1	0	—	1	10	—
Waterloo.....	39,667	8	0	0	0	—	1	0	—
Missouri:									
Kansas City.....	351,819	17	6	2	4	4	5	16	7
St. Joseph.....	78,232	1	1	0	0	0	0	0	1
St. Louis.....	803,853	30	38	51	1	1	20	0	—
North Dakota:									
Fargo.....	24,841	1	0	0	0	1	0	9	0
Grand Forks.....	14,547	2	1	0	0	—	0	0	—
South Dakota:									
Sioux Falls.....	29,206	0	0	0	0	0	1	0	0
Nebraska:									
Lincoln.....	58,761	4	1	2	—	0	2	1	0
Omaha.....	204,382	15	3	3	0	0	1	0	5
Kansas:									
Topeka.....	52,555	1	1	1	0	1	2	26	2
Wichita.....	79,261	7	1	4	0	0	1	0	1
SOUTH ATLANTIC									
Delaware:									
Wilmington.....	117,728	0	1	0	0	0	8	0	1
Maryland:									
Baltimore.....	773,580	96	17	21	7	3	20	54	39
Cumberland.....	32,361	0	1	0	2	0	0	0	1
Frederick.....	11,301	0	0	0	0	0	0	0	0
District of Columbia:									
Washington.....	1437,571	9	9	12	1	1	28	—	12
Virginia:									
Lynchburg.....	30,277	3	0	1	0	0	0	16	1
Norfolk.....	159,089	5	0	0	0	0	1	4	3
Richmond.....	181,044	4	1	1	0	0	18	3	4
Roanoke.....	55,502	2	1	0	0	0	25	0	1
West Virginia:									
Charleston.....	45,597	—	1	—	—	—	—	—	—
Huntington.....	57,918	0	0	0	0	—	0	0	—
Wheeling.....	156,208	0	1	0	—	0	16	0	0
North Carolina:									
Raleigh.....	29,171	5	1	0	0	0	0	0	1
Wilmington.....	35,719	1	0	0	0	0	0	3	2
Winston-Salem.....	56,230	8	0	1	0	0	4	3	1
South Carolina:									
Charleston.....	71,245	0	1	0	0	1	0	0	1
Columbia.....	39,688	2	1	0	0	0	0	2	0
Greenville.....	25,789	0	0	0	0	0	0	0	0
Georgia:									
Atlanta.....	222,963	10	1	1	16	0	1	3	4
Brunswick.....	15,937	8	0	0	0	0	0	1	0
Savannah.....	89,448	3	0	0	1	1	3	0	0
Florida:									
St. Petersburg.....	24,403	0	0	0	0	0	0	0	1
Tampa.....	56,050	0	1	0	0	0	0	0	4

* Population Jan. 1, 1920.

City reports for week ended May 30, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chick- en pox, cases re- ported	Diphtheria		Influenza		Meas- les, cases re- ported	Mumps, cases re- ported	Pneu- monia, deaths re- ported
			Cases, esti- mated expec- tancy	Cases re- ported	Cases re- ported	Deaths re- ported			
EAST SOUTH CENTRAL									
Kentucky:									
Covington.....	57, 877	1	1	0	0	0	0	0	2
Louisville.....	257, 671	2	3	1	6	1	3	0	7
Tennessee:									
Memphis.....	170, 067	5	2	0	0	0	18	1	7
Nashville.....	121, 128	3	0	0	0	2	16	0	4
Alabama:									
Birmingham.....	195, 901	7	1	1	15	3	1	1	9
Mobile.....	63, 858	1	1	0	0	1	0	0	1
Montgomery.....	45, 383		0						1
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith.....	30, 635	0	0	0	0	0	0	1	
Little Rock.....	70, 916	2	1	0	0	0	1	1	
Louisiana:									
New Orleans.....	404, 575	3	6	10	5	3	0	0	0
Shreveport.....	54, 590	0		0	0	1	0	0	1
Oklahoma:									
Oklahoma.....	101, 150	3	1	2	0	0	2	0	3
Texas:									
Dallas.....	177, 274	31	3	3	0	2	2	1	1
Galveston.....	46, 877	0	1	0	0	0	0	0	0
Houston.....	154, 970	2	2	1	0	0	0	0	2
San Antonio.....	184, 727	1	1	0		0	0	0	2
MOUNTAIN									
Montana:									
Billings.....	16, 927	0	0	0	0	0	3	18	0
Great Falls.....	27, 787	0	1	0	0	0	0	4	0
Helena.....	12, 037	0	0	0	0	0	0	0	0
Missoula.....	12, 668	0	0	0	0	0	0	0	0
Idaho:									
Boise.....	22, 806	1	0	0	0	0	0	0	0
Colorado:									
Denver.....	272, 031	15	10	12	7	0	22	0	5
Pueblo.....	43, 519	0	1	1	0	0	0	3	3
New Mexico:									
Albuquerque.....	16, 648	0	1	0	0	0	0	1	0
Arizona:									
Phoenix.....	33, 899	0		1	0	0	1	0	1
Utah:									
Salt Lake City.....	123, 241	21	3	2	0	0	1	23	0
Nevada:									
Reno.....	12, 429	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle.....	1 315, 685	19	4	1	0		3	40	
Spokane.....	104, 573	5	2	3	0		0	0	
Tacoma.....	101, 731	6	1	1	0	0	1	0	0
California:									
Los Angeles.....	666, 853		34	32	9	2	40		15
Sacramento.....	69, 950	9	2	5	0	0	0	0	2
San Francisco.....	539, 038	36	23	16	1	0	13	39	3

¹ Population Jan. 1, 1920.

45489°—25†—3

City reports for week ended May 30, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland.....	1	3	0	0	0	1	1	0	0	0	20
New Hampshire:											
Concord.....	1	0	0	0	0	1	0	0	0	0	10
Vermont:											
Barre.....	1	0	0	0	0	3	0	0	0	0	4
Burlington.....	0	0	0	0	0	0	0	0	0	0	12
Massachusetts:											
Boston.....	45	24	0	0	0	18	2	2	1	5	208
Fall River.....	2	2	0	0	0	3	1	0	0	13	32
Springfield.....	5	19	0	0	0	1	0	0	0	2	34
Worcester.....	6	3	0	0	0	2	0	1	0	2	54
Rhode Island:											
Pawtucket.....	1	5	0	0	0	0	0	0	0	0	14
Providence.....	10	8	0	0	0	5	0	1	0	2	66
Connecticut:											
Bridgeport.....	5	13	0	0	0	4	0	1	0	6	24
Hartford.....	3		0			1					
New Haven.....	4	4	0	0	0	0	1	1	0	30	25
MIDDLE ATLANTIC											
New York:											
Buffalo.....	19	21	1	1	0	5	0	1	0	26	113
New York.....	182	233	0	1	0	104	12	12	2	123	1,398
Rochester.....	11	17	0	0	0	2	0	0	0	12	86
Syracuse.....	11	5	0	0	0	0	1	0	0	3	25
New Jersey:											
Camden.....	2	6	0	0	0	1	1	0	0	9	43
Newark.....	15	19	0	0	0	16	0	0	0	26	106
Trenton.....	2	1	0	0	0	3	1	0	0	3	43
Pennsylvania:											
Philadelphia.....	67	131	1	2	0	39	6	4	1	64	518
Pittsburgh.....	21	84	1	0	0	7	1	0	0	8	148
Reading.....	2	18	0	0	0	0	1	0	0	4	36
Scranton.....	2	0	0	0	0	0	1	0	0	2	
EAST NORTH CENTRAL											
Ohio:											
Cincinnati.....	9	23	2	3	0	8	0	1	0	5	113
Cleveland.....	18	19	1	0	0	17	1	1	0	31	162
Columbus.....	4	15	2	8	0	7	0	1	0	15	70
Toledo.....	12	11	3	0	0	5	1	0	0	12	72
Indiana:											
Fort Wayne.....	1	10	2	0	0	2	0	0	0	4	19
Indianapolis.....	12		6				1				
South Bend.....	3	7	1	0	0	1	0	0	0	2	14
Terre Haute.....	2	6	1	8	0	0	0	0	0	0	19
Illinois:											
Chicago.....	67	196	2	6	0	50	3	5	0	104	699
Cicero.....	1		0				0				
Springfield.....	2	0	0	0	0	0	0	1	0	0	18
Michigan:											
Detroit.....	67	94	10	0	0	30	3	1	0	89	231
Flint.....	5	10	1	2	0	0	1	0	0	7	18
Grand Rapids.....	6	46	1	0	0	2	1	0	0	9	32
Wisconsin:											
Madison.....	2	4	1	0	0	0	0	0	0	16	10
Milwaukee.....	25	21	2	26	8	5	1	0	0	36	130
Racine.....	4	5	1	2	0	1	0	0	0	0	11
Superior.....	1	0	2	0	0	0	1	0	0	0	

¹ Pulmonary tuberculosis only.

City reports for week ended May 30, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST NORTH CENTRAL											
Minnesota:											
Duluth.....	3	18	2	0	0	0	1	0	0	2	18
Minneapolis.....	27	101	8	8	1	4	1	3	0	2	77
St. Paul.....	17	32	5	0	1	4	0	1	0	33	44
Iowa:											
Davenport.....	1	1	5	0	0	0	0	0	0	1	0
Sioux City.....	2	0	1	0	0	0	0	0	0	0	0
Waterloo.....	3	0	0	1	0	0	1	0	0	10	0
Missouri:											
Kansas City.....	7	22	3	0	0	3	1	0	0	6	72
St. Joseph.....	1	1	0	0	0	3	0	0	0	2	31
St. Louis.....	26	80	1	5	0	10	2	1	0	12	211
North Dakota:											
Fargo.....	0	2	0	0	0	0	0	0	0	0	5
Grand Forks.....	0	0	0	0	0	0	0	0	0	0	0
South Dakota:											
Sioux Falls.....	1	0	1	0	0	0	0	0	0	0	3
Nebraska:											
Lincoln.....	2	0	0	0	0	0	0	0	0	11	7
Omaha.....	4	0	2	20	0	2	0	0	0	2	67
Kansas:											
Topeka.....	1	0	1	0	0	0	0	0	0	2	16
Wichita.....	2	0	3	0	0	0	0	0	0	26	36
SOUTH ATLANTIC											
Delaware:											
Wilmington.....	3	3	0	0	0	0	1	0	0	1	20
Maryland:											
Baltimore.....	24	29	1	0	0	19	3	0	0	114	235
Cumberland.....	1	0	0	0	0	2	0	0	0	0	18
Frederick.....	1	0	0	0	0	0	0	0	0	0	3
District of Colum- bia:											
Washington.....	15	17	2	0	0	11	2	3	0	19	144
Virginia:											
Lynchburg.....	1	0	0	0	0	0	0	0	0	6	7
Norfolk.....	1	0	0	0	0	2	1	0	0	13	0
Richmond.....	2	3	1	0	0	4	0	1	0	1	53
Roanoke.....	1	3	1	0	0	0	0	1	0	4	18
West Virginia:											
Charleston.....	1	0	0	0	0	0	0	0	0	0	0
Huntington.....	1	4	0	2	0	1	1	0	0	0	0
Wheeling.....	1	3	0	0	0	1	1	1	0	0	22
North Carolina:											
Raleigh.....	0	0	0	0	0	0	0	0	0	1	8
Wilmington.....	0	0	0	1	0	0	1	0	0	3	13
Winston-Salem.....	1	0	1	3	0	2	0	0	0	9	14
South Carolina:											
Charleston.....	0	0	0	1	0	2	0	6	1	1	24
Columbia.....	0	0	0	0	0	0	1	1	0	4	0
Greenville.....	0	0	0	0	0	0	1	1	0	0	9
Georgia:											
Atlanta.....	4	1	6	0	0	11	1	5	2	4	88
Brunswick.....	1	0	0	0	0	0	1	0	0	0	4
Savannah.....	0	0	0	0	0	2	1	1	0	2	29
Florida:											
St. Petersburg.....	1	0	0	0	0	0	0	0	0	0	8
Tampa.....	1	0	0	0	0	0	0	0	0	0	20
EAST SOUTH CENTRAL											
Kentucky:											
Covington.....	1	1	1	2	0	1	0	0	0	1	17
Louisville.....	3	6	0	6	0	7	1	1	0	5	59
Tennessee:											
Memphis.....	4	6	1	6	0	4	1	2	1	20	60
Nashville.....	2	3	1	13	0	3	1	3	0	2	40
Alabama:											
Birmingham.....	1	16	1	46	0	6	2	2	1	6	75
Mobile.....	0	0	1	0	0	0	1	0	1	0	21
Montgomery.....	1	0	1	0	0	0	0	0	0	0	0

City reports for week ended May 30, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith.....	1	0	0	0			0	0		17	
Little Rock.....	1	0	0	0	0	0	1	3	0	0	
Louisiana:											
New Orleans.....	2	6	3	1	0	21	3	8	1	15	145
Shreveport.....	0	0	0	1	0	0	0	0	0	0	21
Oklahoma:											
Oklahoma.....	2	1	6	0	0	0	0	2	0	2	27
Texas:											
Dallas.....	1	5	2	7	0	3	1	2	1	5	65
Galveston.....	1	0	0	1	0	1	1	0	0	0	9
Houston.....	1	3	0	2	0	5	0	1	0	0	42
San Antonio.....	0	0	0	0	0	15	0	0	0	0	61
MOUNTAIN											
Montana:											
Billings.....	0	2	0	0	0	0	0	0	0	1	4
Great Falls.....	2	19	2	4	0	0	0	0	0	0	11
Helena.....	0	1	0	0	0	0	0	0	0	0	1
Missoula.....	1	3	0	0	0	0	0	0	0	0	3
Idaho:											
Boise.....	1	0	1	0	0	0	0	0	0	1	
Colorado:											
Denver.....	10	12	1	0	0	4	1	0	1	5	71
Pueblo.....	1	2	1	0	0	3	1	0	0	1	8
New Mexico:											
Albuquerque.....	0	0	0	0	0	3	0	0	0	0	5
Arizona:											
Phoenix.....		0		0	0	4		0	0	1	15
Utah:											
Salt Lake City.....	2	3	1	0	0	2	0	1	0	7	31
Nevada:											
Reno.....	0	1	1	2	0	0	0	0	0	0	3
PACIFIC											
Washington:											
Seattle.....	7	8	2	8			0	0		81	
Spokane.....	4	0	5	1			0	1		4	
Tacoma.....	2	3	2	4	0	0	0	0	0	9	15
California:											
Los Angeles.....	12	22	1	40	0	21	2	1	0		187
Sacramento.....	1	1	0	5	0	4	1	1	1	0	22
San Francisco.....	15	14	1	0	0	8	0	0	0	53	117

City reports for week ended May 30, 1925—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pollagra		Poliomyelitis (infantile paralysis)			Typhus fever	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths	Cases	Deaths
NEW ENGLAND											
Massachusetts:											
Boston.....	1	1	0	0	0	0	0	1	0	0	0
Fall River.....	0	0	1	1	0	0	0	0	0	0	0
Worcester.....	0	0	1	0	0	0	0	0	0	0	0
Rhode Island:											
Providence.....	0	0	0	0	0	0	0	1	0	0	0
Connecticut:											
New Haven.....	1	0	0	1	0	0	0	0	0	0	0
MIDDLE ATLANTIC											
New York:											
New York.....	4	2	5	3	0	0	1	1	1	1	0
New Jersey:											
Newark.....	0	0	1	0	0	0	1	0	0	0	0
Pennsylvania:											
Philadelphia.....	1	1	1	1	0	0	1	0	0	0	0
EAST NORTH CENTRAL											
Ohio:											
Cleveland.....	1	0	0	1	0	0	0	0	0	0	0
Illinois:											
Chicago.....			1								
Michigan:											
Detroit.....	1	1	1	1	0	0	0	0	0	0	0
Wisconsin:											
Milwaukee.....	2	2	0	0	0	0	0	0	0	0	0
WEST NORTH CENTRAL											
Missouri:											
St. Louis.....	0	1	0	0	0	0	0	0	0	0	0
SOUTH ATLANTIC											
Maryland:											
Baltimore.....	1	0	2	0	0	0	0	0	0	0	0
Virginia:											
Norfolk.....	0	0	0	0	0	1	0	0	0	0	0
North Carolina:											
Wilmington.....	0	0	0	0	0	0	0	0	0	1	0
Winston-Salem.....	0	0	0	0	1	1	0	0	0	0	0
South Carolina:											
Charleston.....	0	0	1	1	0	0	0	0	0	0	0
Georgia:											
Atlanta.....	0	0	0	0	2	1	0	0	0	0	0
Savannah.....	0	0	0	0	1	0	0	0	0	0	0
EAST SOUTH CENTRAL											
Alabama:											
Birmingham.....	0	0	1	0	0	0	0	0	0	0	0
Mobile.....	0	0	0	0	0	0	0	0	0	0	1
WEST SOUTH CENTRAL											
Arkansas:											
Little Rock.....	0		0		0	1	0	0	0	0	0
Louisiana:											
New Orleans.....	0	0	0	0	4	5	0	0	0	0	0
Shreveport.....	0	0	0	0	0	3	0	0	0	0	0
Oklahoma:											
Oklahoma.....	0	0	0	1	0	0	0	0	0	0	0
Texas:											
Dallas.....	0	0	0	0	1	1	0	0	0	0	0
Galveston.....	0	0	0	0	0	1	0	0	0	0	0
Houston.....	0	0	0	0	0	2	0	0	0	1	0
San Antonio.....	0	0	0	0	0	1	0	0	0	0	0

City reports for week ended May 30, 1925—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (Infantile paralysis)			Typhus fever	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths	Cases	Deaths
MOUNTAIN											
Arizona:											
Phoenix.....	0	0	0	0	0	0	-----	2	1	0	0
Utah:											
Salt Lake City....	0	1	0	0	0	0	0	0	0	0	0
PACIFIC											
California:											
Los Angeles.....	1	0	0	0	0	0	0	2	0	0	0
Sacramento.....	0	0	0	0	0	0	0	1	0	0	0
San Francisco.....	2	1	0	0	0	0	0	1	1	0	0

The following table gives the rates per hundred thousand population for 105 cities for the 10-week period ended May 30, 1925. The population figures used in computing the rates were estimated as of July 1, 1923, as this is the latest date for which estimates are available. The 105 cities reporting cases had an estimated aggregate population of nearly 29,000,000, and the 97 cities reporting deaths had more than 28,000,000 population. The number of cities included in each group and the aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, March 22 to May 30, 1925—Annual rates per 100,000 population¹

DIPHTHERIA CASE RATES

	Week ended—									
	Mar. 28	Apr. 4	Apr. 11	Apr. 18	Apr. 25	May 2	May 9	May 16	May 23	May 30
105 cities.....	² 168	177	158	160	162	158	² 157	³ 164	⁴ 153	⁵ 151
New England.....	119	171	166	129	144	127	109	154	127	⁶ 106
Middle Atlantic.....	231	241	220	228	218	213	212	238	203	211
East North Central.....	112	93	96	110	113	110	113	110	⁴ 108	⁷ 112
West North Central.....	247	229	226	168	187	201	278	⁸ 212	251	197
South Atlantic.....	95	81	73	102	108	104	104	85	87	⁹ 77
East South Central.....	57	23	34	46	40	40	11	34	40	¹⁰ 12
West South Central.....	121	83	107	74	79	70	65	56	42	65
Mountain.....	134	124	105	289	267	115	105	153	134	143
Pacific.....	¹ 179	374	171	168	165	206	² 123	¹¹ 138	165	168

¹ The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1923.

² Spokane, Wash., not included. Report not received at time of going to press.

³ Sioux Falls, S. Dak., and Tacoma, Wash., not included.

⁴ Cicero, Ill., not included.

⁵ Hartford, Conn.; Indianapolis, Ind.; Cicero, Ill.; Charleston, W. Va.; and Montgomery, Ala., not included.

⁶ Hartford, Conn., not included.

⁷ Cicero, Ill., and Indianapolis, Ind., not included.

⁸ Sioux Falls, S. Dak., not included.

⁹ Charleston, W. Va., not included.

¹⁰ Montgomery, Ala., not included.

¹¹ Tacoma, Wash., not included.

Summary of weekly reports from cities, March 22 to May 30, 1925—Annual rates per 100,000 population—Continued

MEASLES CASE RATES

	Week ended—									
	Mar. 28	Apr. 4	Apr. 11	Apr. 18	Apr. 25	May 2	May 9	May 16	May 23	May 30
105 cities.....	² 507	558	531	589	645	581	² 627	² 624	⁴ 600	⁵ 597
New England.....	755	957	1,011	917	1,217	1,004	984	1,188	1,051	⁶ 912
Middle Atlantic.....	633	734	680	815	782	734	797	768	617	704
East North Central.....	798	736	710	742	901	761	890	854	⁴ 953	⁷ 932
West North Central.....	89	77	58	91	102	79	112	⁸ 80	236	145
South Atlantic.....	136	209	207	256	295	305	240	329	327	⁹ 256
East South Central.....	34	69	34	97	189	206	343	166	337	¹⁰ 229
West South Central.....	9	88	51	65	37	28	32	14	23	14
Mountain.....	38	219	57	267	219	534	181	57	181	248
Pacific.....	¹ 151	209	241	154	203	162	¹ 95	¹¹ 178	131	165

SCARLET FEVER CASE RATES

105 cities.....	² 419	409	367	342	360	309	² 323	² 352	⁴ 307	⁵ 281
New England.....	604	534	529	350	407	430	415	358	350	⁶ 215
Middle Atlantic.....	405	436	359	343	336	323	319	331	265	271
East North Central.....	483	442	422	403	433	324	366	399	⁴ 416	⁷ 358
West North Central.....	755	736	647	651	692	518	618	⁸ 734	556	531
South Atlantic.....	167	175	152	167	175	132	106	165	146	⁹ 122
East South Central.....	286	263	280	229	257	263	263	326	246	¹⁰ 193
West South Central.....	102	51	88	60	121	111	88	74	23	65
Mountain.....	248	277	258	315	401	334	277	353	324	410
Pacific.....	¹ 222	191	174	145	148	125	¹ 151	¹¹ 197	162	139

SMALLPOX CASE RATES

105 cities.....	² 58	57	51	48	62	50	² 46	² 46	⁴ 61	⁵ 46
New England.....	0	12	2	0	2	0	2	0	0	⁶ 0
Middle Atlantic.....	7	21	10	18	12	8	6	7	2	2
East North Central.....	33	24	22	27	39	30	44	56	⁴ 71	⁷ 43
West North Central.....	135	87	97	85	89	75	60	⁸ 80	68	70
South Atlantic.....	67	49	43	53	79	63	45	37	65	⁹ 10
East South Central.....	423	42	572	395	457	435	377	189	440	¹⁰ 439
West South Central.....	107	46	51	14	42	32	28	37	130	56
Mountain.....	19	19	19	10	29	10	48	29	29	57
Pacific.....	¹ 191	255	148	162	264	206	¹ 176	¹¹ 191	186	168

TYPHOID FEVER CASE RATES

105 cities.....	² 11	9	10	12	16	18	² 14	² 13	⁴ 19	⁵ 16
New England.....	12	5	2	7	17	10	5	12	25	⁶ 16
Middle Atlantic.....	7	4	9	11	14	22	13	10	19	9
East North Central.....	3	4	6	4	7	4	9	6	⁴ 5	⁷ 8
West North Central.....	6	2	2	2	6	12	2	⁸ 0	4	10
South Atlantic.....	12	30	20	12	14	28	28	26	39	⁹ 41
East South Central.....	57	17	17	34	80	46	46	63	74	¹⁰ 48
West South Central.....	42	32	37	56	51	51	46	79	65	74
Mountain.....	0	0	19	38	29	0	0	0	19	10
Pacific.....	¹ 28	20	9	12	23	17	¹ 9	¹¹ 3	6	9

¹ Spokane, Wash., not included. Report not received at time of going to press.

² Sioux Falls, S. Dak., and Tacoma, Wash., not included.

³ Cicero, Ill., not included.

⁴ Hartford, Conn.; Indianapolis, Ind.; Cicero, Ill.; Charleston, W. Va.; and Montgomery, Ala., not included.

⁵ Hartford, Conn., not included.

⁶ Cicero, Ill., and Indianapolis, Ind., not included.

⁷ Sioux Falls, S. Dak., not included.

⁸ Charleston, W. Va., not included.

⁹ Montgomery, Ala., not included.

¹⁰ Tacoma, Wash., not included.

Summary of weekly reports from cities, March 22 to May 30, 1925—Annual rates per 100,000 population—Continued

INFLUENZA DEATH RATES

	Week ended—									
	Mar. 28	Apr. 4	Apr. 11	Apr. 18	Apr. 25	May 2	May 9	May 16	May 23	May 30
105 cities.....	33	34	27	27	50	22	15	³ 14	⁴ 14	⁵ 13
New England.....	30	35	32	27	30	20	10	7	5	⁶ 8
Middle Atlantic.....	22	21	16	24	17	14	10	12	11	9
East North Central.....	40	38	27	24	33	23	16	11	⁴ 12	⁷ 14
West North Central.....	46	39	37	50	48	31	11	¹¹ 11	18	18
South Atlantic.....	12	28	26	12	43	26	24	10	6	⁹ 12
East South Central.....	86	69	74	80	86	51	51	80	86	¹⁰ 42
West South Central.....	36	36	46	36	25	31	15	20	24	31
Mountain.....	38	181	86	38	76	48	19	57	19	0
Pacific.....	53	29	12	29	12	12	16	12	25	8

PNEUMONIA DEATH RATES

105 cities.....	206	204	201	192	203	167	151	² 127	⁴ 129	⁵ 126
New England.....	219	251	211	206	186	149	161	134	119	⁶ 120
Middle Atlantic.....	199	215	190	204	223	206	185	143	144	146
East North Central.....	214	182	190	190	211	148	130	125	⁴ 125	⁷ 123
West North Central.....	106	193	228	171	136	72	77	⁸ 58	70	59
South Atlantic.....	252	234	238	232	191	195	156	136	134	⁹ 157
East South Atlantic.....	299	299	343	306	286	194	160	166	137	¹⁰ 181
West South Central.....	168	168	168	173	158	127	138	112	84	76
Mountain.....	200	162	267	210	219	124	124	162	172	76
Pacific.....	159	159	119	98	147	127	123	78	135	82

Number of cities included in summary of weekly reports and aggregate population of cities in each group, estimated as of July 1, 1923

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases	Aggregate population of cities reporting deaths
Total.....	105	97	28,898,350	28,140,964
New England.....	12	12	2,098,746	2,098,746
Middle Atlantic.....	10	10	10,304,114	10,304,114
East North Central.....	17	17	7,032,535	7,032,535
West North Central.....	14	11	2,515,330	2,381,454
South Atlantic.....	22	22	2,566,901	2,566,901
East South Central.....	7	7	911,885	911,885
West South Central.....	8	6	1,124,564	1,023,013
Mountain.....	9	9	546,445	546,445
Pacific.....	6	3	1,767,830	1,275,841

¹ Sioux Falls, S. Dak., and Tacoma, Wash., not included.

² Cicero, Ill., not included.

³ Hartford, Conn.; Indianapolis, Ind.; Cicero, Ill.; Charleston, W. Va.; and Montgomery, Ala., not included.

⁴ Hartford, Conn., not included.

⁵ Cicero, Ill., and Indianapolis, Ind., not included.

⁶ Sioux Falls, S. Dak., not included.

⁷ Charleston, W. Va., not included.

⁸ Montgomery, Ala., not included.

FOREIGN AND INSULAR

THE FAR EAST

Wireless health news messages.—The following data, covering the two-week period May 10 to 23, 1925, were sent by wireless from the Far Eastern Bureau of the Health Section of the League of Nations, located at Singapore, to the headquarters at Geneva, Switzerland:

WEEK ENDED MAY 16, 1925

Port	Plague		Cholera		Smallpox	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Calcutta.....	0	0		47	104	76
Bombay.....		11		1	25	13
Madras.....	0	0	0	0	26	16
Rangoon.....		7		4	35	24
Karachi.....		1	0	0	1	
Negapatam.....	0	0		1	0	0
Singapore ¹	1	1	0	0	0	0
Penang ¹						
Batavia.....	0	0	0	0	0	0
Soerabaya ¹	0	0	0	0	2	2
Samarang.....	0	0	0	0	0	0
Belawan Deli ¹						
Macassar.....	0	0	0	0	0	0
British North Borneo ¹						
Bangkok ¹	0	0	1	1	5	4
Saigon and Cholon.....	0	0	0	0	0	0
Hongkong.....	0	0	0	0	1	1
Shanghai ¹						
Nagasaki.....	0	0	0	0	5	
Manila.....	0	0	0	0	0	0
Kobe.....	0	0	0	0	0	0
Shimonoseki.....	0	0	0	0	0	0
Yokohama.....	0	0	0	0	0	0
Columbo.....	0	0	0	0	0	0

¹ Report not received this week.

² Infected rats found.

³ No infected rats found.

WEEK ENDED MAY 23, 1925

Calcutta ¹						
Bombay.....		10	0	0	19	42
Madras.....	0	0	0	0	40	16
Rangoon.....		6	0	0	31	20
Karachi.....		3	0	0	1	1
Negapatam ¹						
Singapore.....	1	1	0	0	1	
Penang.....	0	0	0	0	0	0
Batavia.....	0	0	0	0	0	0
Soerabaya.....	0	0	0	0	0	0
Samarang.....	0	0	0	0	0	0
Belawan Deli.....	0	0	0	0	0	0
Macassar.....	0	0	0	0	0	0
British North Borneo.....	0	0	0	0	0	0
Bangkok ¹	0	0		2	5	3
Saigon and Cholon.....	0	0	0	0		1
Hongkong.....	0	0	0	0	1	
Shanghai ¹						
Nagasaki.....	0	0	0	0	4	
Manila.....	0	0	0	0	0	0
Kobe.....	0	0	0	0	0	0
Yokohama.....	0	0	0	0	0	0
Shimonoseki.....	0	0	0	0	0	0

¹ Report not received this week.

² Infected rats found.

BRAZIL

Plague—State of Ceara—April, 1925.—Press notices dated April 27, 1925, state that plague is present in the interior cities of Sao Benedicto and Jardim, State of Ceara, Brazil, with 22 reported deaths and a large mortality among rats.

CANADA

Communicable diseases—Ontario—April 26–May 30, 1925—Comparative.—During the five-week period, April 26 to May 30, 1925, communicable diseases were reported in the Province of Ontario, Canada, as follows:

Disease	1925		1924	
	Cases	Deaths	Cases	Deaths
Cerebrospinal meningitis.....		3	9	8
Chancroid.....			5	
Chicken pox.....	363		350	
Diphtheria.....	192	10	270	26
German measles.....	21		171	
Goiter.....	42		2	1
Gonorrhea.....	215		75	
Influenza.....		28		14
Lethargic encephalitis.....		2	3	8
Measles.....	2,152	3	4,577	13
Mumps.....	478		978	
Pneumonia.....		168		188
Polio-myelitis.....	5	2		
Scarlet fever.....	507	6	659	8
Smallpox.....	16	1	32	2
Syphilis.....	177		115	
Tuberculosis.....	209	92	217	105
Typhoid fever.....	53	9	56	2
Whooping cough.....	400	11	141	4

Locality of smallpox occurrence.—Smallpox was reported at eight localities in the Province of Ontario during the period under report. The largest number of cases, viz, five, occurred at Welland. At Meriton and Chatham there were reported three cases each; at Ottawa, two cases; at Crowland, St. Catherines, and Guelph, one case each. At Kenora one death from smallpox was notified.

ECUADOR

Mortality—Communicable diseases—Quito—April, 1925.—During the month of April, 1925, 170 deaths from all causes were reported at Quito, Ecuador, including dysentery, 4; measles, 13; typhoid fever, 2; tuberculosis, all forms, 6. There were reported 25 deaths from acute bronchitis, 5 from pneumonia, 14 from other diseases of the respiratory system, and 6 from organic diseases of the heart. Population, 100,819.

Plague—Plague-infected rats—Guayaquil—April 16-30, 1925.—During the period April 16 to 30, 1925, three cases of plague with two deaths were reported at Guayaquil, Ecuador. During the same period, out of 10,583 rats taken, 43 were found plague infected.

EGYPT

Plague—May 7-13, 1925—Summary.—During the week ended May 13, 1925, 12 cases of plague were reported in Egypt, 1 case being notified at Suez and 10 cases in the Province of Beni-Souef. The total number of cases reported from January 1 to May 13, 1925, was 40, as compared with 224 cases reported during the corresponding period of the year 1924.

MADAGASCAR

Plague—Tananarive Province—March 16-31, 1925.—During the period March 16 to 31, 1925, 94 cases of plague with 81 deaths were notified in the Province of Tananarive, Madagascar. Of the cases reported, 3 occurred in the town of Tananarive, in the interior of the island, and 91 cases at other localities of Tananarive Province. For distribution according to type see page 1340.

NEW ZEALAND

Poliomyelitis—April 14-27, 1925.—Poliomyelitis (infantile paralysis) was reported still present in New Zealand¹ during the two weeks ended April 27, 1925, with 47 cases and 6 deaths.

ZANZIBAR

Leprosy—March, 1925.—During the month of March, 1925, a case of leprosy was reported at Zanzibar. The case was sent to the Funzi leper settlement.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

The reports contained in the following tables must not be considered as complete or final as regards either the lists of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended June 19, 1925 *

CHOLERA

Place	Date	Cases	Deaths	Remarks
India.....				Apr. 12-18, 1925: Cases, 4,991; deaths, 2,692.
Calcutta.....	Apr. 19-May 2.....	116	109	
Madras.....	May 3-9.....	1		
Siam:				
Bangkok.....	Apr. 12-18.....	4	3	

* From medical officers of the Public Health Service, American consuls, and other sources.

¹ Public Health Reports, May 22, 1925, p. 1076, and May 29, 1925, p. 1119.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received During Week Ended June 19, 1925—Continued

PLAGUE

Place	Date	Cases	Deaths	Remarks
Ceylon:				
Colombo.....	Apr. 25-May 2.....	1	2	
Egypt.....				May 7-13, 1925: Cases, 12. Jan. 1-May 13, 1925: Cases, 40. Corresponding period year 1924: Cases, 224.
City—				
Suez.....	May 13.....	1		Bubonic.
Province—				
Beni-Souef.....	May 7-13.....	10		
Fayoum.....	do.....	1		
India.....				Apr. 12-18, 1925: Cases, 5,410; deaths, 4,649.
Bombay.....	Apr. 19-25.....	23	30	
Karachi.....	May 3-9.....	5	3	
Madras Presidency.....	Apr. 5-18.....	43	26	
Java:				
East Java—				
Soerabaya.....	Apr. 2-8.....	1	1	
West Java—				
Batavia.....	Apr. 18-24.....	14	14	Province.
Cheribon.....	Mar. 12-25.....	8	22	
Pekalongan.....	do.....		38	
Tegal.....	do.....		8	
Madagascar:				
Tananarive Province.....	Mar. 16-31.....	94	81	Bubonic, cases, 63; deaths, 53. Pneumonic, 7; deaths, 6. Septicemic, cases, 24; deaths, 22.
Tananarive Town.....	do.....	3	3	Pneumonic, 2. Septicemic, 1.
Other localities.....	do.....	91	78	Bubonic, cases, 63; deaths, 53. Pneumonic, cases, 5; deaths, 4. Septicemic, cases, 23; deaths, 21.
Siam:				
Bangkok.....	Apr. 12-18.....	1	1	
Straits Settlements:				
Singapore.....	Apr. 19-25.....	7	4	

SMALLPOX

Brazil:				
Pernambuco.....	Mar. 28-Apr. 18.....	21	13	
British East Africa:				
Mombasa.....	Mar. 29-Apr. 18.....	13	4	
Tanganyika Territory.....	Mar. 22-28.....	16	2	
Zanzibar.....	Mar. 1-31.....	1		
Canada:				
British Columbia—				
Vancouver.....	May 18-24.....	1		
New Brunswick—				
Victoria.....	May 24-30.....	1		County.
Ontario.....				Apr. 26-May 30, 1925: Cases, 16; deaths, 1. Corresponding period, year 1924—cases, 32; deaths, 2.
Ceylon:				
Colombo.....	Apr. 19-25.....		1	Port case.
China:				
Antung.....	May 5-10.....	1		
Foochow.....	Apr. 26-May 2.....			Present.
Hongkong.....	Mar. 29-Apr. 18.....	14	13	
Manchuria—				
Dairen.....	Apr. 6-12.....	11	2	
Harbin.....	Apr. 22-28.....	5		
Nanking.....	Apr. 25-May 9.....			Present.
Chosen:				
Seoul.....	Apr. 1-30.....	1		
Great Britain:				
London.....	May 3-9.....	5		
New Castle-on-Tyne.....	May 17-23.....	4		
India.....				Apr. 12-18, 1925: Cases, 7,302; deaths, 1,805.
Bombay.....	Apr. 19-25.....	40	23	
Calcutta.....	Apr. 19-May 2.....	407	330	
Karachi.....	May 2-9.....	7	3	
Madras.....	May 3-9.....	41	18	
Indo-China:				
Saigon.....	Apr. 12-18.....	3	2	Including 100 kilometers of surrounding country.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received During Week Ended June 19, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Japan:				
Nagasaki.....	Apr. 27-May 3.....	10	2	
Java:				
East Java—				
Soerabaya.....	Apr. 2-8.....	31	13	
Mexico:				
Durango.....	May 1-31.....		11	
Guadalajara.....	May 26-June 1.....		2	
Mexico City.....	May 9-16.....	2		
Portugal:				
Lisbon.....	Apr. 27-May 10.....		2	
Oporto.....	May 10-16.....	1		
Slam:				
Bangkok.....	Apr. 12-18.....	2	2	
Spain:				
Madrid.....	Apr. 1-30.....		3	
Malaga.....	May 10-23.....		7	

TYPHUS FEVER

Chile:				
Concepcion.....	Apr. 28-May 4.....		1	
Talcahuano.....	May 10-16.....		1	
Valparaiso.....	May 3-9.....		1	
Egypt:				
Cairo.....	Mar. 5-18.....	4	3	
Mexico:				
Mexico City.....	May 10-16.....	2		
Palestine:				
Jaffa District.....	Apr. 28-May 11.....	2		
Jerusalem.....	Apr. 28-May 11.....	4		
Tiberias District.....	May 5-11.....	2		

Reports Received from December 27, 1924, to June 12, 1925¹

CHOLERA

Place	Date	Cases	Deaths	Remarks
Ceylon.....				June 29-Dec. 27, 1924: Cases, 14; deaths, 13. Dec. 28, 1924-Jan. 24, 1925: Cases, 24; deaths, 17.
Colombo.....	Nov. 16-22.....	1		
Do.....	Jan. 11-24.....	2	2	
India.....				Oct. 19, 1924-Jan. 3, 1925: Cases, 27,164; deaths, 16,228. Jan. 4-Apr. 11, 1925: Cases, 32,063; deaths, 19,388.
Bombay.....	Nov. 23-Dec. 20.....	4	4	
Do.....	Jan. 18-24.....	1	1	
Calcutta.....	Oct. 26-Jan. 3.....	59	51	
Do.....	Jan. 4-Apr. 18.....	393	339	
Madras.....	Nov. 16-Jan. 3.....	69	40	
Do.....	Jan. 4-May 2.....	144	102	
Rangoon.....	Nov. 9-Dec. 20.....	9	2	
Do.....	Jan. 4-Apr. 25.....	26	18	
Indo-China.....				Aug. 1-Sept. 30, 1924: Cases, 14; deaths, 10. Dec. 1-31, 1924: Cases, 5; deaths, 2.
Province—				
Anam.....	Aug. 1-31.....	1	1	
Cambodia.....	Aug. 1-Sept. 30.....	6	5	
Do.....	Dec. 1-31.....	1		
Cochin-China.....	Aug. 1-Dec. 31.....	10	5	
Saigon.....	Nov. 30-Dec. 6.....	1		
Do.....	Mar. 15-21.....	1	1	
Tonkin.....	Dec. 1-31.....	1	1	
Siam:				
Bangkok.....	Nov. 9-29.....	4	2	
Do.....	Jan. 18-Apr. 4.....	11	7	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June, 12, 1925—Continued

PLAGUE

Place	Date	Cases	Deaths	Remarks
Azores:				
Fayal Island—				
Castelo Branco	Nov. 25			Present with several cases.
Feteira	do	1		
St. Michael Island	Nov. 2-Jan. 3	30	13	
Do.	Jan. 18-24	3	1	
Brazil:				
Bahia	Jan. 4-May 2	13	9	Bubonic.
Santos	Year, 1924	2		
British East Africa:				
Tanganyika Territory	Nov. 23-Dec. 27	17	10	
Do.	Jan. 18-Mar. 14	18	12	
Uganda	Aug.-Dec. 1924	279	243	
Do.	Jan. 1-31	29	28	
Canary Islands:				
Las Palmas	Jan. 21-23	2		Stated to be endemic.
Do.	Feb. 4	1		Stated to have been infected
Do.	Mar. 26	1	1	with plague Sept. 30, 1924.
Realejo Alto	Dec. 19	3	1	Vicinity of Santa Cruz de Tenerife.
Teneriffe—				
Santa Cruz	Jan. 3	1		In vicinity.
Celebes:				
Macassar	Oct. 29			Epidemic.
Ceylon:				
Colombo	Nov. 9-Jan. 3	12	9	
Do.	Jan. 4-Apr. 14	21	21	
China:				
Foochow	Dec. 28-Jan. 3			Present.
Nanking	Nov. 23-Mar. 7			Do.
Shing Hsien	October, 1924		790	
Ecuador:				
Chimborazo Province—				Mar. 16-Apr. 15, 1925: Cases, 10;
Alausi District	Jan. 14		14	deaths, 4.
Daule	Mar. 16-31	1		At 2 localities on Guayaquil &
Guayaquil	Nov. 16-Dec. 31	9	3	Quito Ry.
Do.	Jan. 1-May 15	72	33	Rats taken, 27,004; found infected, 92.
Naranjito	Feb. 16-Mar. 15	1		Rats taken, 99,017; found infected, 395
Yaguachi	Feb. 1-Mar. 15	2	1	
Egypt:				
City—				Year 1924: Cases, 373. Jan. 1-
Suez	Apr. 2-22	2	2	May 6, 1925: Cases, 28; deaths, 18.
Province—				
Assiout	May 2	1	1	
Beni-Souef	Jan. 18	1	1	
Dakhla	Jan. 7	1	1	
Fayoum	Apr. 5-May 2	4	3	
Girgeh	Jan. 9-Apr. 5	2	2	
Kalloubiah	Jan. 5-Apr. 22	5	2	
Menoufieh	Jan. 1-Apr. 9	8	4	
Minia	Apr. 1-May 5	4	2	
Gold Coast				
				September - December, 1924: deaths, 52.
Greece:				
Patras	Apr. 5	1		
Hawaii:				
Honokaa	Nov. 4	1		Plague-infected rodents found Dec. 9, 1924, Jan. 15, Apr. 23 and 30, 1925. Vicinity Pacific Sugar Mill, Island of Hawaii.
India:				
Bombay	Nov. 22-Jan. 3	4	3	Oct. 19, 1924, to Jan. 3, 1925: Cases, 28,154; deaths, 21,505.
Do.	Jan. 4-Apr. 18	68	55	Jan. 4-Apr. 4, 1925: Cases, 65,576; deaths, 58,027.
Calcutta	Jan. 18-24	1	1	
Karachi	Nov. 30-Dec. 6	2	1	
Do.	Jan. 4-Feb. 21	12	11	
Do.	Mar. 29-Apr. 25	6	7	
Madras Presidency	Nov. 23-Jan. 3	685	487	
Do.	Jan. 4-24	658	511	
Do.	Mar. 8-14	80	48	
Do.	Apr. 19-25	27	16	
Rangoon	Oct. 26-Jan. 3	26	25	
Do.	Jan. 4-Apr. 25	245	215	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June 12, 1925—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Indo-China				Aug. 1-Sept. 30, 1924: Cases, 25; deaths, 20. Dec. 1-31, 1924: Cases, 11; deaths, 11. Corresponding month, 1923: Cases, 15; deaths, 5.
Province—				
Anam	Aug. 1-Sept. 30	4	4	
Do.	Dec. 1-31	5	5	
Cambodia	Aug. 1-Sept. 30	13	15	
Do.	Dec. 1-31	6	6	
Cochin-China	do	3	1	
Saigon	Dec. 25-31	1	1	Including 100 square kilometers of surrounding territory.
Do.	Jan. 11-17	2	1	Do.
Iraq	June 29-Jan. 3	20	14	
Bagdad	Mar. 22-28	1	1	
Japan	Aug. 10-Dec. 6	19		
Java:				
East Java—				Province of Kediri. Epidemic
Blitar	Nov. 11-22			Do.
Pare	Nov. 29			
Samarang	Mar. 22-28	2	2	
Sidoardja	Jan. 2			Declared epidemic. Province of Soerabaya.
Soerabaya	Nov. 16-Dec. 31	71	72	Mar. 29-Apr. 4, 1925: 2 plague rats found.
Do.	Jan. 15-Apr. 1	28	26	Epidemic plague in one locality.
Soerakarta	Feb. 20			
West Java—				Province.
Batavia	Apr. 11-17	12	12	
Cheribon	Oct. 14-Nov. 3		14	
Do.	Nov. 18-Dec. 22		80	
Do.	Jan. 1-14		44	
Do.	Feb. 5-11		13	
Do.	Feb. 19-25		13	
Do.	Mar. 5-11		14	
Paseroean	Dec. 27		29	Province. Epidemic in one locality.
Pekalongan	Oct. 14-Nov. 3		29	Pekalongan Province.
Do.	Nov. 18-Dec. 31		177	
Do.	Jan. 1-14		81	
Do.	Feb. 5-11		36	
Do.	Feb. 19-25		38	
Do.	Mar. 5-11		28	
Proballingga	Dec. 27			Province. Epidemic.
Tegal	Oct. 14-Dec. 31		26	Pekalongan Province.
Do.	Jan. 1-14		37	
Do.	Feb. 5-11		7	
Do.	Feb. 19-25		10	
Do.	Mar. 5-11		3	
Madagascar:				
Fort-Dauphin (port)	Nov. 1-Dec. 15	12	5	
Do.	Feb. 1-15	1	1	Bubonic.
Itasy Province	Nov. 1-Dec. 15	4	2	
Do.	Feb. 1-Mar. 15	6	6	
Majunga (port)	Nov. 1-30	1	1	
Moramanga Province				Nov. 1-Dec. 15, 1924: Cases, 49; deaths, 34. Jan. 16-Mar. 15, 1925: Cases, 8; deaths, 8.
Tamatave (port)	Nov. 1-30	1	1	
Tananarive Province				Oct. 16-Dec. 31, 1924: Cases, 298; deaths, 274.
Do.				Jan. 1-Mar. 15: Cases, 456; deaths, 387.
Tananarive (town)	Mar. 1-15	3	3	Year 1924: Cases, 161; deaths, 144.
Mauritius Island.				
District—				
Flacq	Dec. 1-31	5	4	
Pamplemousses	do	1	1	
Plaines Wilhems	January - December, 1924	54	47	Not present March, April, May.
Port Louis	February-December, 1924	101	92	
Mexico:				
Tampico	Apr. 6, 1925			Plague rat found in vicinity of Government wharves.
Morocco:				
Marrakech				Feb. 9, 1925: Present in native quarter of town. Stated to be pneumonic in form and of high mortality.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June 12, 1925—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Nigeria.....				August-November, 1924: Cases, 387; deaths, 317.
Palestine:				
Jerusalem.....	Mar. 3-9.....	1		
Peru:				
Callao.....	February, 1925.....	6	6	
Siam:				
Bangkok.....	Dec. 28-Jan. 3.....	1	1	
Do.....	Jan. 25-Apr. 4.....	14	13	
Siberia:				
Transbaikalia—				
Turga.....	October, 1924.....		3	On Chita Railroad.
Straits Settlements:				
Singapore.....	Nov. 9-15.....	1	1	
Do.....	Jan. 4-Apr. 18.....	32	26	
Syria:				
Beirut.....	Jan. 11-Apr. 10.....	2		
Turkey:				
Constantinople.....	Jan. 9-15.....	5	5	
Union of South Africa.....	Nov. 22-Jan. 3.....	28	15	In Cape Province, Orange Free State, and Transvaal.
Do.....	Jan. 4-Apr. 4.....	55	23	Do.
On vessels:				
S. S. Conde.....				At Marseille, France, Nov. 8, 1924. Plague rat found. Vessel left for Tamatave, Madagascar, Nov. 12, 1924.
Steamship.....	November, 1924.....	1	1	At Majunga, Madagascar, from Djibuti, Red Sea port.

SMALLPOX

Algeria.....				July 1-Dec. 31, 1924: Cases, 409.
Algiers.....	Jan. 1-Apr. 30.....	16		Jan. 1-20, 1925: Cases, 107.
Arabia:				
Aden.....	Jan. 25-Apr. 18.....	14	1	
Argentina:				
Buenos Aires.....	Mar. 15-21.....	1		
Belgium.....	Jan. 1-Feb. 10.....	4		
Bolivia:				
La Paz.....	Nov. 1-Dec. 21.....	20	11	
Do.....	Jan. 1-Mar. 31.....		12	
Brazil:				
Pernambuco.....	Nov. 9-Jan. 3.....	100	27	
Do.....	Jan. 4-Mar. 28.....	111	56	
Porto Alegre.....	Apr. 12-18.....		1	
British East Africa:				
Kenya.....				
Mombasa.....	Jan. 18-Feb. 28.....	66	14	
Do.....	Mar. 8-28.....	29	7	
Tanganyika Territory.....	Feb. 15-21.....	1		
Uganda—				
Entebbe.....	Oct. 1-31.....	4		
British South Africa:				
Northern Rhodesia.....	Oct. 29-Dec. 15.....	57	2	
Do.....	Jan. 27-Apr. 14.....	12		Natives.
Do.....	Mar. 17-Apr. 14.....	9		
Southern Rhodesia.....	Jan. 29-Mar. 25.....	4	1	
Bulgaria:				
Sofia.....	Mar. 12-18.....	1		Variceloid.
Canada:				
Alberta—				
Calgary.....	Mar. 15-21.....	1		
British Columbia—				
Ocean Falls.....	Mar. 7-27.....	6		Very mild.
Vancouver.....	Dec. 14-Jan. 3.....	32		
Do.....	Jan. 4-Apr. 12.....	305		
Do.....	Apr. 19-May 17.....	16		
Victoria.....	Jan. 18-Apr. 25.....	11		
Manitoba—				
Winnipeg.....	Dec. 7-Jan. 3.....	14		
Do.....	Jan. 4-Apr. 11.....	31		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June 12, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Canada—Continued.				
New Brunswick—				
Northumberland	Feb. 8-14	1		County.
Ontario				Nov. 30-Dec. 27, 1924: Cases, 33.
Hamilton	Jan. 24-30	1		Dec. 28, 1924, to Apr. 23, 1925:
Kingston	Apr. 12-18	1		Cases, 69; deaths, 1.
Ottawa	Mar. 29-May 9	3		
Welland	Mar. 22-Apr. 25	7		
Ceylon				July 27-Nov. 29, 1924: Cases, 27;
Colombo	Jan. 18-Feb. 7	4		deaths, 1.
Do.	Mar. 8-Apr. 18	17		
China:				
Amoy	Nov. 9-Feb. 21			Present.
Do.	Feb. 22-May 2		29	Prevalent in surrounding district.
Antung	Nov. 17-Dec. 28	5		
Do.	Jan. 5-Feb. 14	15	1	
Do.	Mar. 2-Apr. 5	9	1	
Do.	Apr. 12-26	5		
Canton	Mar. 15-Apr. 18			Prevalent.
Chefoo	Mar. 15-21			Prevalent. No foreign cases.
Chungking	Mar. 22-May 2			Stated to be widely prevalent.
Foochow	Nov. 2-May 2			Present.
Hongkong	Nov. 9-Jan. 3	6	2	
Do.	Jan. 4-Apr. 4	36	20	
Manchuria—				
Dairen	Jan. 19-Apr. 25	18	3	
Harbin	Jan. 15-May 5	7		
Nanking	Jan. 4-Apr. 18			Prevalent.
Shanghai	Dec. 7-27	1	2	
Do.	Jan. 18-Apr. 25		9	
Do.	Apr. 12-25	2	1	
Chosen:				
Seoul	Dec. 1-31	1		
Do.	Mar. 1-31	2		
Colombia:				
Buenaventura	Feb. 15-Apr. 4	3		
Santa Marta	Mar. 15-28			Present in mild form in localities in vicinity.
Cuba:				
Santiago	Apr. 12-18	3	1	
Czechoslovakia				Apr.-June, 1924: Cases, 1; occurring in Province of Moravia.
Dominican Republic:				
Puerta Plata	Mar. 8-21	3		
Dutch Guiana:				
Paramaribo	Apr. 20	1		
Ecuador:				
Guayaquil	Nov. 16-Dec. 15	4		
Egypt:				
Alexandria	Nov. 12-Dec. 31	10		
Do.	Jan. 8-Apr. 29	10		
Cairo	Jan. 29-Feb. 4	1	1	
Estonia				Dec. 1-31, 1924: Cases, 2.
France				July-December, 1924: Cases, 81.
Do.	January, 1925	10		
Boulogne-Sur-Mer	Apr. 1-30	1	1	
Dunkirk	Mar. 2-8	1		From vessel. In quarantine.
St. Malo	Feb. 2-8	7	1	Believed to have been imported on steamship Ruyth from Sfax, Tunis.
Germany				June 29-Nov. 8, 1924: Cases, 7.
Frankfort-on-Main	Jan. 1-10	1		
Gibraltar	Dec. 8-14	1		
Do.	May 4-10	2		
Gold Coast				July-December, 1924: Cases, 106; deaths, 1.
Great Britain:				
England and Wales	Nov. 23-Jan. 3	472		
Do.	Jan. 4-May 9	2,555		
Newcastle-on-Tyne	Jan. 18-Feb. 21	9		
Do.	Mar. 1-May 16	7		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June 12, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Greece.....				January-June, 1924: Cases, 170; deaths, 27.
Do.....				July-December, 1924: Cases, 38; deaths, 26.
Saloniki.....	Nov. 11-Dec. 22.....	3		
Do.....	Feb. 17-Mar. 2.....	4		
Haiti:				
Cape Haitien.....	Mar. 22-Apr. 2.....	6		
India.....				Oct. 19, 1924, to Jan. 3, 1925: Cases, 12,564; deaths, 2,857.
Bombay.....	Nov. 2-Jan. 3.....	30	18	Jan. 4-Apr. 11, 1925: Cases, 68,386; deaths, 15,736.
Do.....	Jan. 4-Apr. 4.....	601	307	
Do.....	Apr. 12-18.....	40	21	
Calcutta.....	Oct. 26-Jan. 8.....	307	170	
Do.....	Jan. 4-Apr. 13.....	4,255	3,068	
Karachi.....	Nov. 16-Jan. 3.....	16	2	
Do.....	Jan. 4-Feb. 14.....	52	6	
Do.....	Feb. 22-May 2.....	99	26	
Madras.....	Nov. 16-Jan. 3.....	122	48	
Do.....	Jan. 4-Mar. 7.....	552	212	
Do.....	Mar. 15-May 2.....	599	246	
Rangoon.....	Oct. 26-Jan. 3.....	86	28	
Do.....	Jan. 4-Feb. 7.....	287	49	
Do.....	Feb. 15-Apr. 25.....	1,268	464	
Indo-China.....				Aug. 1-Sept. 30, 1924: Cases, 223; deaths, 76. Dec. 1-31, 1924: Cases, 485; deaths, 114.
Province—				
Anam.....	Aug. 1-Sept. 30.....	49	11	
Do.....	Dec. 1-31.....	167	26	
Cambodia.....	Aug. 1-Sept. 30.....	40	9	
Do.....	Dec. 1-31.....	30	13	
Cochin-China.....				Aug. 1-Sept. 30, 1924: Cases, 115; deaths, 49. Dec. 1-31, 1924: Cases, 50; deaths, 13.
Saigon.....	Nov. 16-Jan. 3.....	17	5	Including 100 square kilometers of surrounding country.
Do.....	Jan. 4-Feb. 21.....	32	8	
Do.....	Mar. 1-Apr. 11.....	55	9	Do.
Tonkin.....	Aug. 1-Sept. 30.....	19	7	
Do.....	Dec. 1-31.....	238	62	
Iraq.....	June 29-Jan. 10.....	138	67	
Do.....	Jan. 11-20.....	4	2	
Bagdad.....	Nov. 9-Dec. 27.....	2	1	
Do.....	Mar. 1-28.....	2		
Italy.....				June 22-Dec. 27, 1924: Cases, 63.
Jamaica.....				Nov. 30, 1924-Jan. 3, 1925: Cases, 50. Reported as alastrim.
Do.....				Jan. 4-Apr. 25, 1925: Cases, 275. Reported as alastrim.
Kingston.....	Nov. 30-Dec. 27.....	4		Reported as alastrim.
Japan.....				Aug. 1-Nov. 15, 1924: Cases, 4.
Nagasaki.....	Feb. 9-May 10.....	34	9	
Taihoku.....	Apr. 4-10.....	1		
Taiwan.....	Jan. 1-31.....	1		
Java:				
East Java—				
Paseroean.....	Oct. 26-Nov. 1.....	9	1	
Do.....	Nov. 12-19.....			Epidemic in 2 native villages.
Soerabaya.....	Oct. 19-Dec. 31.....	685	212	
Do.....	Jan. 15-Apr. 1.....	590	80	
West Java—				
Batam.....	Oct. 14-20.....	2		
Batavia.....	Oct. 21-Nov. 14.....	2		
Do.....	Dec. 30-Jan. 2.....	19	4	
Buitenzorg.....	Dec. 25-31.....	1		Batavia Residency.
Cheribon.....	Oct. 14-Nov. 24.....	15		
Do.....	Jan. 1-28.....	3		
Krawang.....	Jan. 15-21.....	1		
Pekalongan.....	Oct. 14-Nov. 24.....	22		
Do.....	Dec. 25-31.....	3		
Premalang.....	Jan. 8-14.....	1		Province.
Preanger.....	Nov. 18-24.....	1		Pekalongan Residency.
Latvia.....				Oct. 1-Nov. 30, 1924: Cases, 6.
Lithuania.....				Jan. 1-Mar. 31, 1925: Cases, 9.
Malta.....				Jan. 1-31, 1925: Cases, 2.
				Apr. 1-30, 1925: Cases, 6.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June 12, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Mexico:				
Chiapas (State).....	Mar. 1.....			Reported severely prevalent.
Durango.....	Dec. 1-31.....		5	
Do.....	Jan. 1-Apr. 30.....		29	
Guadalajara.....	Dec. 23-29.....		1	
Do.....	Jan. 6-May 25.....		19	
Mexico City.....	Nov. 23-Dec. 27.....	5		Including municipalities in Federal district.
Do.....	Jan. 11-May 9.....	73		
Monterey.....				Jan. 24, 1925: Outbreak, Mar. 14, 1925, present.
Oaxaca (State).....	Mar. 1.....			Reported severely prevalent.
Salina Cruz.....	Dec. 1-31.....	1	1	
Do.....	Feb. 22-Mar. 31.....	7	1	
Saltillo.....	Feb. 22-Apr. 11.....		5	
San Luis Potosi.....	Mar. 29-May 23.....		5	
Tampico.....	Dec. 11-31.....	5	4	
Do.....	Jan. 1-Apr. 30.....	66	20	
Torreon.....	Apr. 1-30.....	1	1	
Tuxpan district.....	Apr. 17-May 7.....	20		
Vera Cruz.....	Dec. 1-Jan. 3.....		10	
Do.....	Jan. 5-Apr. 19.....		39	
Villa Hermosa.....	Dec. 28-Jan. 10.....			Present. Locality, capital, State of Tabasco.
Yucatan (State).....	Apr. 5-11.....			In country towns.
Nigeria:				January-June, 1924: Cases, 357; deaths, 87.
Do.....				July-November, 1924: Cases, 87; deaths, 25.
Paraguay:				
Asuncion.....	Jan. 4-10.....		1	
Persia:				
Teheran.....	Sept. 23-Dec. 31.....		12	
Do.....	Jan. 1-Mar. 19.....		19	
Peru:				
Arequipa.....	Nov. 24-30.....		1	
Do.....	Jan. 1-Feb. 28.....		4	
Philippine Islands:				
Manila.....	Mar. 29-Apr. 4.....	3		
Poland:				Sept. 21-Dec. 28, 1924: Cases, 30; deaths, 2. Jan. 4-Feb. 28, 1925: Cases, 17; deaths, 1.
Portugal:				
Lisbon.....	Dec. 7-Jan. 3.....	17		
Do.....	Jan. 4-Apr. 23.....	140		Jan. 4-Apr. 18, 1925: Deaths, 35.
Oporto.....	Nov. 30-Dec. 27.....	3	2	
Do.....	Jan. 11-Apr. 25.....	5		
Russia:				January-June, 1924: Cases, 18,229; July-November, 1924: Cases, 3,665.
Senegal:				
Dakar.....	Mar. 16-22.....	4		
Siam:				
Bangkok.....	Dec. 28-Jan. 3.....	1	1	
Do.....	Jan. 18-Feb. 21.....		19	
Do.....	Mar. 1-Apr. 4.....	23	7	
Sierra Leone:				
Freetown.....	Feb. 7-Mar. 15.....	3		
Kalyima.....	Mar. 9-15.....	1		
Spain:				
Barcelona.....	Nov. 27-Dec. 31.....		5	
Do.....	Mar. 19-25.....		1	
Cadiz.....	Nov. 1-Dec. 31.....		51	
Do.....	Jan. 1-Feb. 28.....		10	
Madrid.....	Year 1924.....		40	
Do.....	January-February.....		13	
Malaga.....	Nov. 23-Jan. 3.....		97	
Do.....	Jan. 4-May 9.....		102	
Valencia.....	Nov. 30-Dec. 6.....	2		
Do.....	Feb. 15-May 2.....	6		
Straits Settlements:				
Singapore.....	Feb. 22-Apr. 18.....	5	1	
Switzerland:				
Berne.....	Mar. 15-Apr. 18.....	5		
Lucerne.....	Nov. 1-Dec. 31.....	19		
Do.....	Jan. 1-31.....	24		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June 12, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Syria:				
Aleppo.....	Nov. 23-Dec. 27.....	13		
Do.....	Jan. 4-Feb. 28.....	71	18	
Beirut.....	Feb. 11-Apr. 10.....	2		
Damascus.....	Jan. 6-Feb. 20.....	24		
Tripoli:				
Tripoli.....	July 14-Jan. 2.....	53		
Tunis:				
Tunis.....	Nov. 25-Dec. 29.....	42	35	
Do.....	Jan. 1-Apr. 22.....		325	
Do.....	Apr. 30-May 6.....		13	
Turkey:				
Constantinople.....	Dec. 13-19.....	5		
Do.....	Mar. 16-Apr. 30.....	8	1	
Union of South Africa.....				Nov. 1-Dec. 31, 1924: Cases, 14.
				Jan. 1-31, 1925: Cases, 4—na-
				tives. Mar. 1-31, 1925: Cases,
				9; white, 3; native, 6.
Cape Province.....	Feb. 1-21.....			Outbreaks.
De Aar district.....	Nov. 9-Jan. 31.....			Do.
Natal.....	Mar. 1-7.....			Do.
Orange Free State.....	Nov. 2-Apr. 18.....			Do.
Ladybrand district.....	Jan. 15-31.....			Outbreak on farm.
Transvaal.....	Nov. 9-Jan. 10.....			Do.
Do.....	Feb. 1-21.....			Outbreaks.
Uruguay.....				January-June, 1924: Cases, 101;
				deaths, 2.
Do.....				July-November, 1924: Cases, 53;
				deaths, 5.
Yugoslavia.....	Year 1924.....	330	64	
Do.....	Jan. 1-Feb. 28.....	6	1	
Belgrade.....	Mar. 1-Apr. 7.....	6		
On vessel:				
S. S. Eldridge.....	Mar. 23.....	1		At Port Townsend, from Yoko-
				hama and ports.
S. S. Habana.....	Feb. 18.....	1		At Santiago de Cuba, from
				Kingston, Jamaica.
S. S. Ruyth.....				At St. Malo, France, January,
				1924, from Sfax, Tunis; be-
				lieved to have imported small-
				pox infection.

TYPHUS FEVER

Algeria:				July 1-Dec. 20, 1924: Cases, 101;
Algiers.....	Nov. 1-Dec. 31.....	5	1	deaths, 14.
Do.....	Jan. 1-Apr. 20.....	14	7	In villages, department of Al-
				giers: Cases, natives, 24; Euro-
				peans, 3.
Argentina:				
Rosario.....	Jan. 1-31.....		1	
Bolivia:				
La Paz.....	Nov. 1-Dec. 31.....	3		
Do.....	Jan. 1-31.....	2		
Do.....	Mar. 1-31.....	1		
Bulgaria:				January-June, 1924: Cases, 191;
Do.....				deaths, 28.
Sofia.....	Apr. 30-May 6.....	1		July-October, 1924: Cases, 5.
Chile:				
Concepcion.....	Nov. 25-Dec. 1.....		1	
Do.....	Jan. 6-Apr. 20.....		4	
Iquique.....	Nov. 25-Dec. 1.....		2	
Do.....	Feb. 1-Mar. 28.....		2	
Talcahuano.....	Nov. 16-Dec. 20.....		5	
Do.....	Jan. 4-10.....		1	
Valparaiso.....	Nov. 25-Dec. 7.....		4	
Do.....	Jan. 11-Apr. 25.....		20	
China:				
Antung.....	Mar. 16-22.....	1		
Manchuria—				
Harbin.....	Apr. 8-14.....	1		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June 12, 1925—Continued

TYPHUS FEVER—Continued

Place	Date	Cases	Deaths	Remarks
Chosen:				
Chemulpo.....	Feb. 1-28.....	1	—	
Seoul.....	Nov. 1-30.....	1	1	
Do.....	Feb. 1-Mar. 31.....	6	2	
Czechoslovakia:				December, 1924: Cases, 5.
Do.....	Jan.-Mar.....	68	2	
Egypt:				
Alexandria.....	Dec. 3-9.....	1	1	
Do.....	Mar. 12-Apr. 29.....	4	2	
Cairo.....	Oct. 1-Dec. 23.....	13	8	
Do.....	Jan. 22-Mar. 4.....	4	2	
Estonia.....				Dec. 1-31, 1924: Cases, 5. Jan. 1-31, 1925: Cases, 4. Mar. 1-31, 1925: Cases, 2.
France.....				July-October, 1924: Cases, 7.
Gold Coast.....				Oct. 1-31, 1924: 1 case.
Greece:				May-June, 1924: Cases, 116; deaths, 8.
Do.....				July-December, 1924: Cases, 40; deaths, 4.
Athens.....	Feb. 1-Apr. 10.....	—	10	
Saloniki.....	Nov. 17-Dec. 15.....	3	2	
Do.....	Jan. 25-Apr. 29.....	3	—	
Japan:				Aug. 1-Nov. 15, 1924: Cases, 2.
Latvia:				October-December, 1924: Cases, 30. Feb. 1-Mar. 31, 1925: Cases, 15.
Lithuania:				August-October, 1924: Cases, 15; deaths, 1.
Do.....				Jan. 1-31, 1925: Cases, 27; deaths, 2.
Mexico:				
Durango.....	Dec. 1-31.....	—	1	
Do.....	Mar. 15-Apr. 30.....	1	2	
Guadalajara.....	Dec. 23-29.....	—	1	
Mexico City.....	Nov. 9-Jan. 3.....	80	—	
Do.....	Jan. 11-May 9.....	113	—	Including municipalities in Federal District.
San Luis Potosi.....	Mar. 8-May 2.....	—	2	
Tampico.....	May 29.....	1	—	
Morocco:				November, 1924: Cases, 5.
Palestine:				Nov. 12-Dec. 29, 1924: Cases, 10.
Ekron.....	Dec. 23-29.....	1	—	
Jerusalem.....	do.....	2	—	
Do.....	Jan. 20-26.....	1	—	
Mikveh Israel.....	do.....	1	—	
Petach-Tikvah.....	Mar. 24-30.....	1	—	
Ramleh.....	Feb. 10-Mar. 23.....	2	—	
Tiberias.....	Feb. 24-Mar. 2.....	2	—	
Peru:				
Arequipa.....	Nov. 24-Dec. 31.....	—	3	
Do.....	Mar. 1-31.....	—	1	
Poland:				Sept. 28, 1924-Jan. 3, 1925: Cases, 751; deaths, 57. Jan. 4-Feb. 11, 1925: Cases, 827; deaths, 68. Feb. 22-28, 1925: Cases, 147; deaths, 15.
Portugal:				
Lisbon.....	Dec. 29-Jan. 4.....	—	2	
Do.....	Apr. 6-12.....	—	1	
Oporto.....	Jan. 4-Feb. 7.....	2	—	
Rumania:				January-June, 1924: Cases, 2,906; deaths, 328.
Do.....				July-December, 1924: Cases, 288; deaths, 28.
Constanza.....	Dec. 1-20.....	1	—	
Do.....	Feb. 1-28.....	2	—	
Russia:				Jan. 1-June 30, 1924: Cases, 95,682. July-November, 1924: Cases, 34,729.
Leningrad.....	June 29-Nov. 22.....	12	—	
Spain:				
Madrid.....	Year 1924.....	—	3	
Malaga.....	Dec. 21-27.....	—	1	
Sweden:				
Goteborg.....	Jan. 18-Feb. 28.....	2	—	
Tunis:				July 1-Dec. 20, 1924: Cases, 40.
Tunis.....	Mar. 5-25.....	9	1	
Do.....	Apr. 2-May 6.....	25	5	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to June 12, 1925—Continued

TYPHUS FEVER—Continued

Place	Date	Cases	Deaths	Remarks
Turkey:				
Constantinople.....	Nov. 15-Dec. 19....	6	1	
Do.....	Jan. 2-Apr. 30.....	10	1	
Union of South Africa.....				Nov. 1-Dec. 31, 1924: Cases, 345; deaths, 87. Jan. 1-Mar. 31, 1925: Cases, 200; deaths, 24; native. In white population, cases, 12.
Cape Province.....	Nov. 1-Dec. 31.....	126	24	
Do.....	Jan. 1-Mar. 31.....	91	12	
East London.....	Nov. 16-22.....	1	1	
Do.....	Jan. 18-Apr. 4.....	3	2	
Port Elizabeth.....	Feb. 22-Mar. 7.....	1	1	
Natal.....	Nov. 1-Dec. 31.....	130	50	
Do.....	Jan. 1-Mar. 31.....	49	7	
Durban.....	Feb. 15-Mar. 28.....	4		
Orange Free State.....	Nov. 1-Dec. 31.....	59	8	
Do.....	Jan. 1-Mar. 31.....	41	5	
Transvaal.....	Nov. 1-Dec. 31.....	30	5	
Do.....	Jan. 1-Mar. 31.....	14		
Yugoslavia.....				Year 1924: Cases, 319; deaths, 22. Jan. 1-Feb. 28, 1925: Cases, 87; deaths, 8.
Belgrade.....	Nov. 24-Dec. 28.....	5		
Do.....	Apr. 8-30.....	4		

YELLOW FEVER

Gold Coast.....	October-November, 1924.	4	4	
Salvador:				
San Salvador.....	June-October, 1924.	77	28	Last case, Oct. 22, 1924.